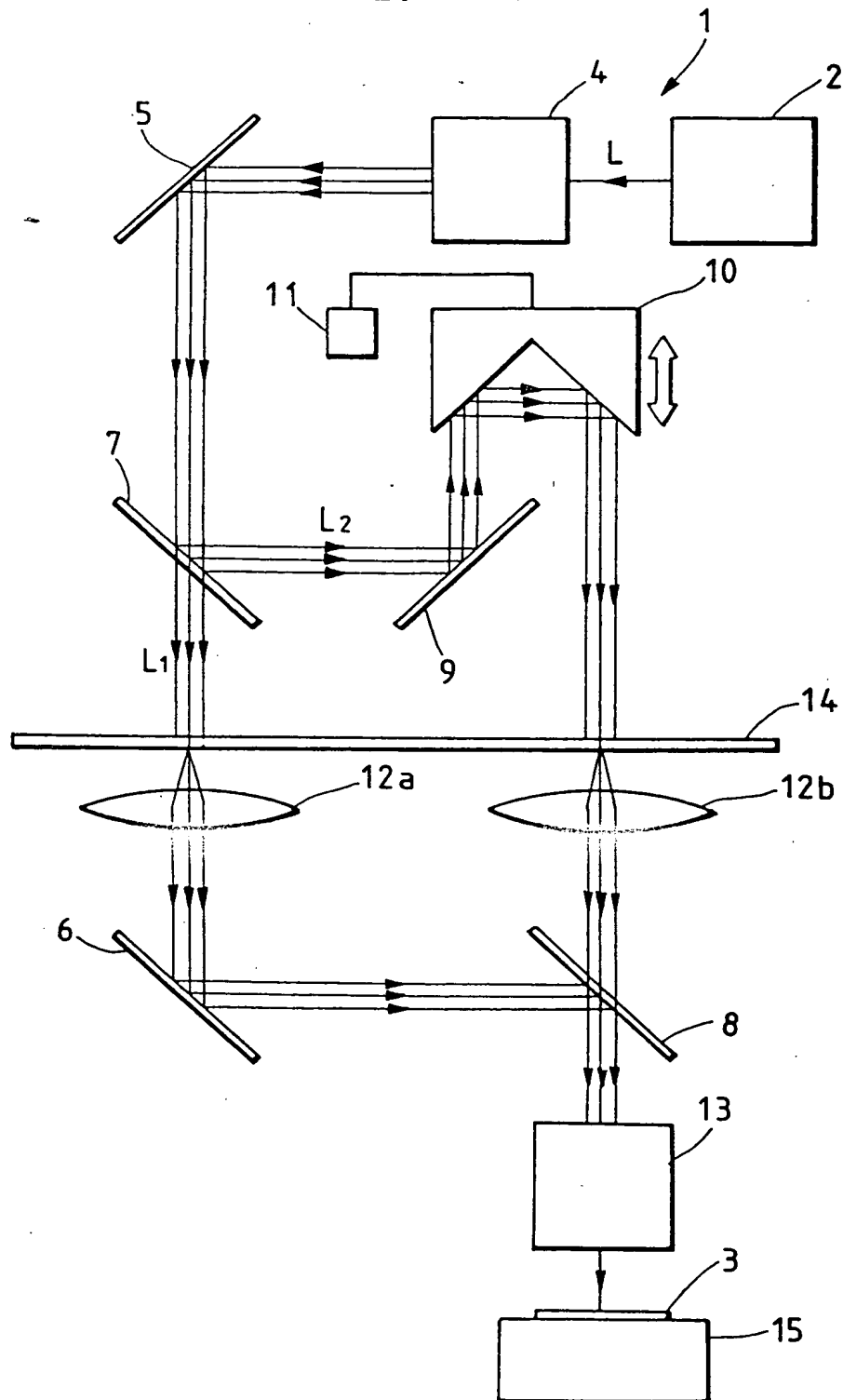


FIG. 1A



09955-0807

FIG. 1B

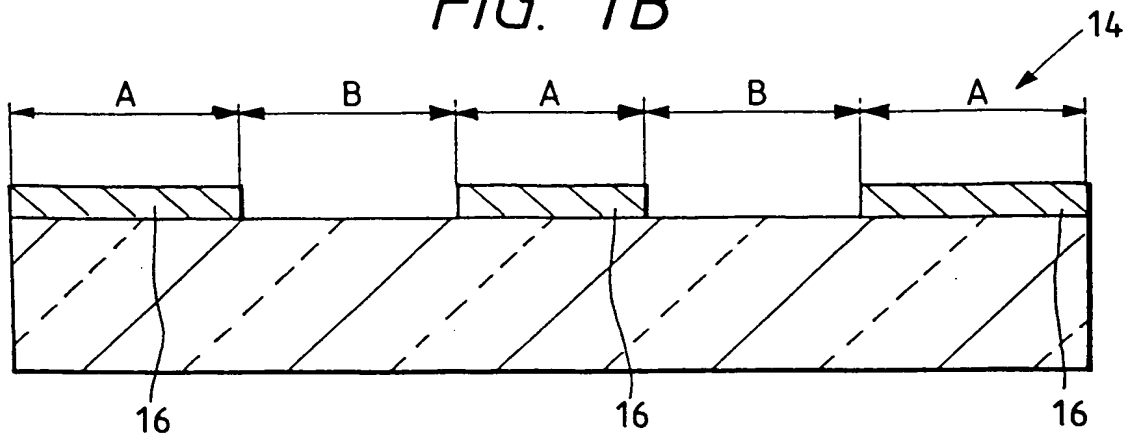


FIG. 1C

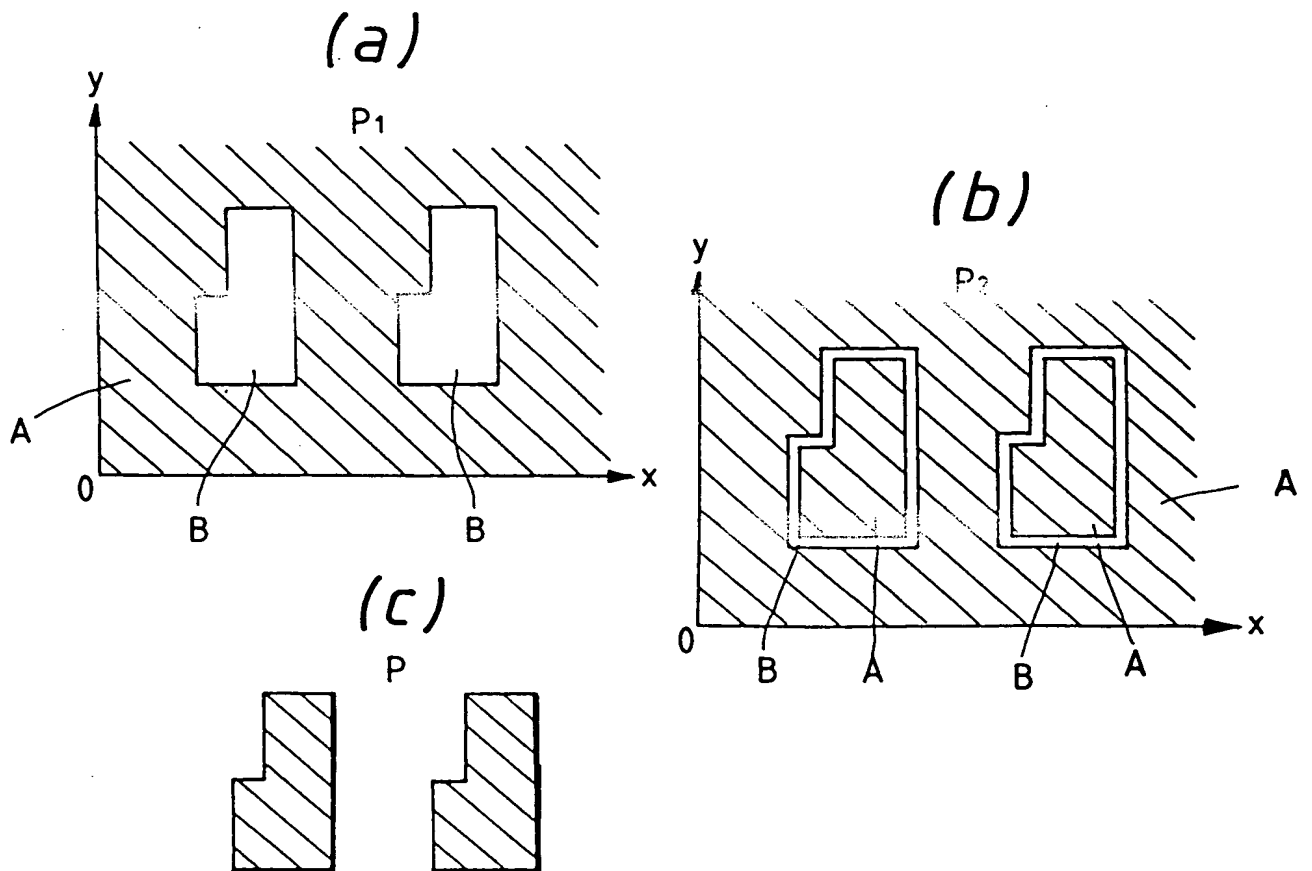
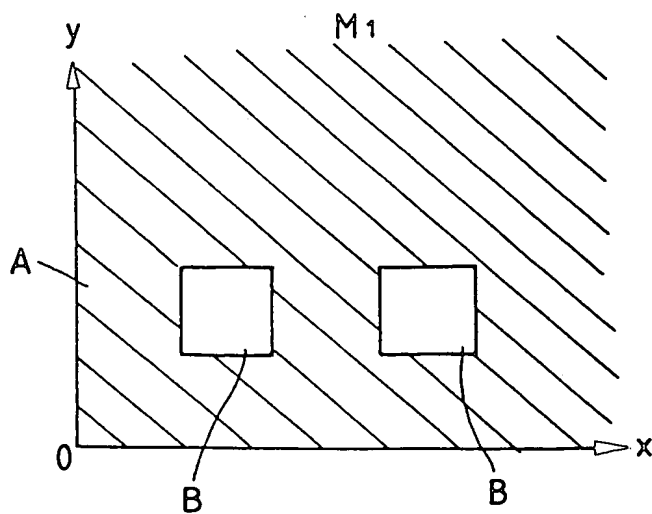


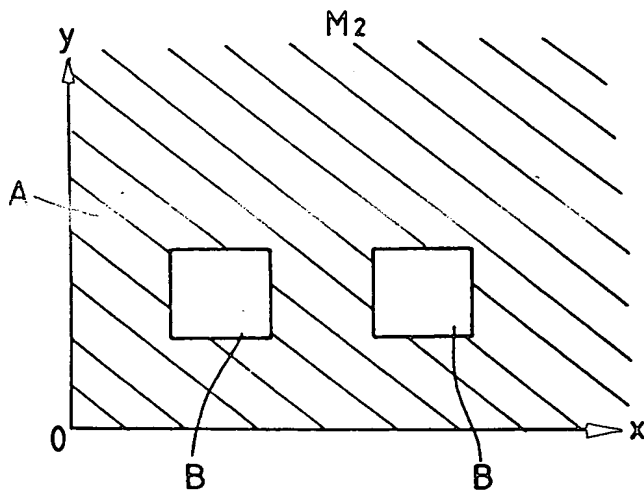
FIG. 1D

FIG. 1E

(a)



(b)



(c)

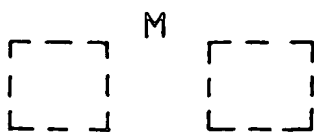


FIG. 1G

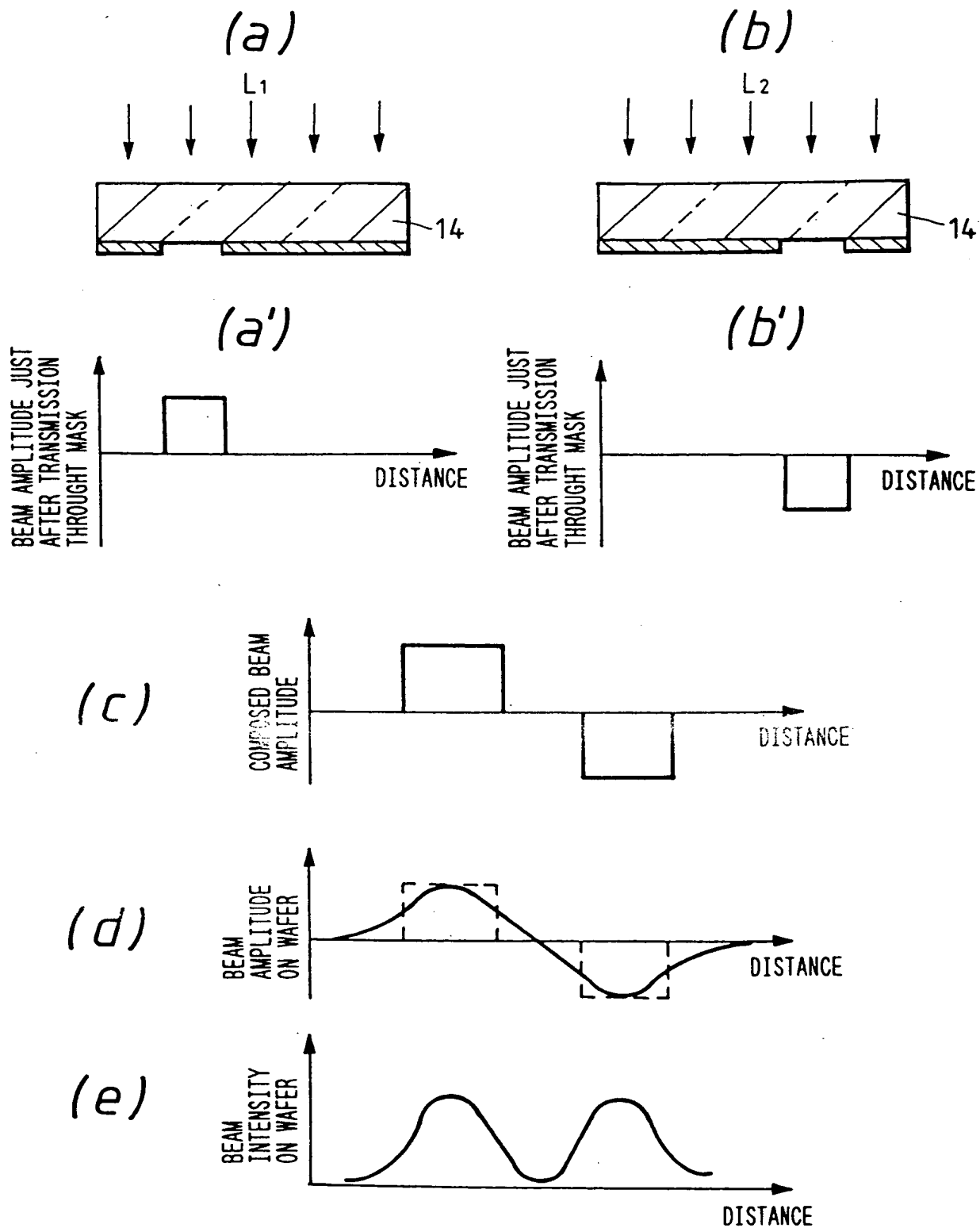
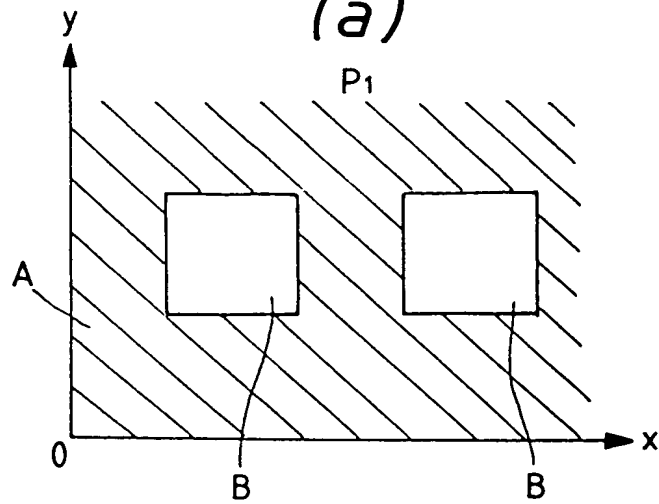
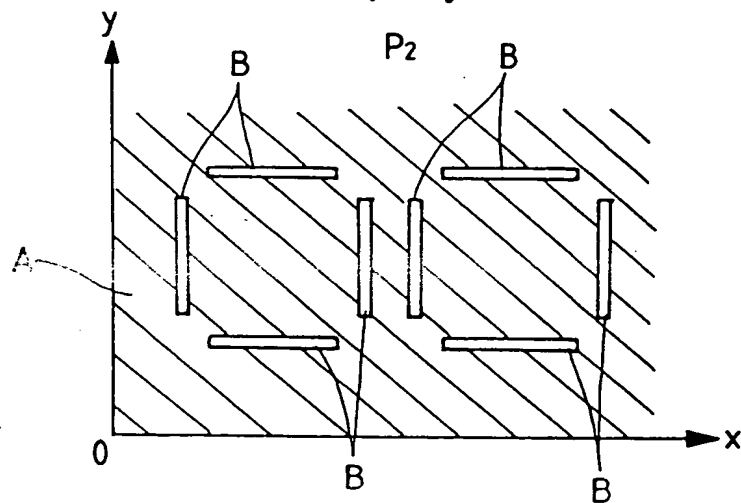


FIG. 1H

(a)



(b)



(c)

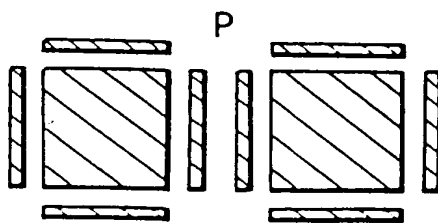


FIG. 11

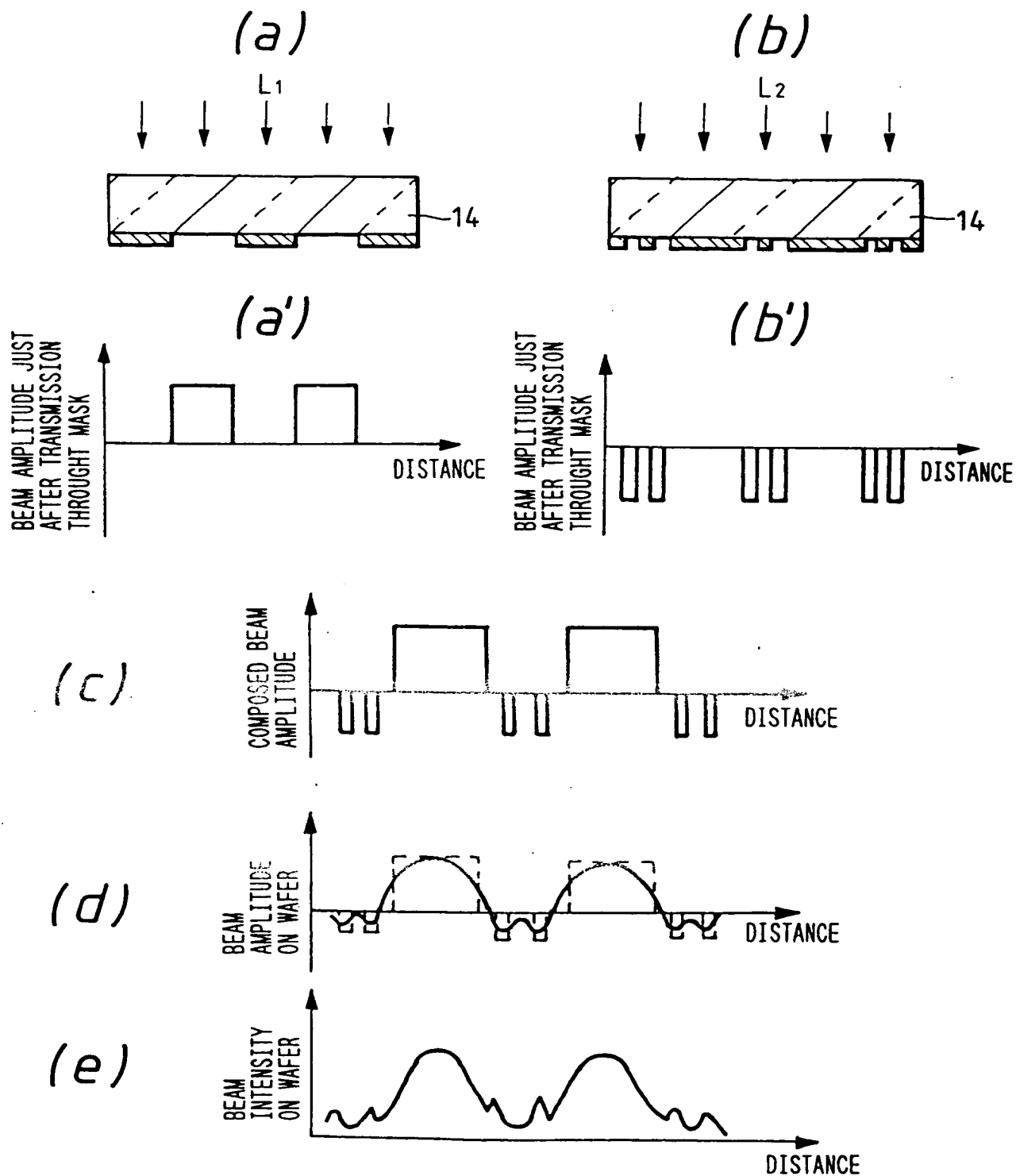


FIG. 1J

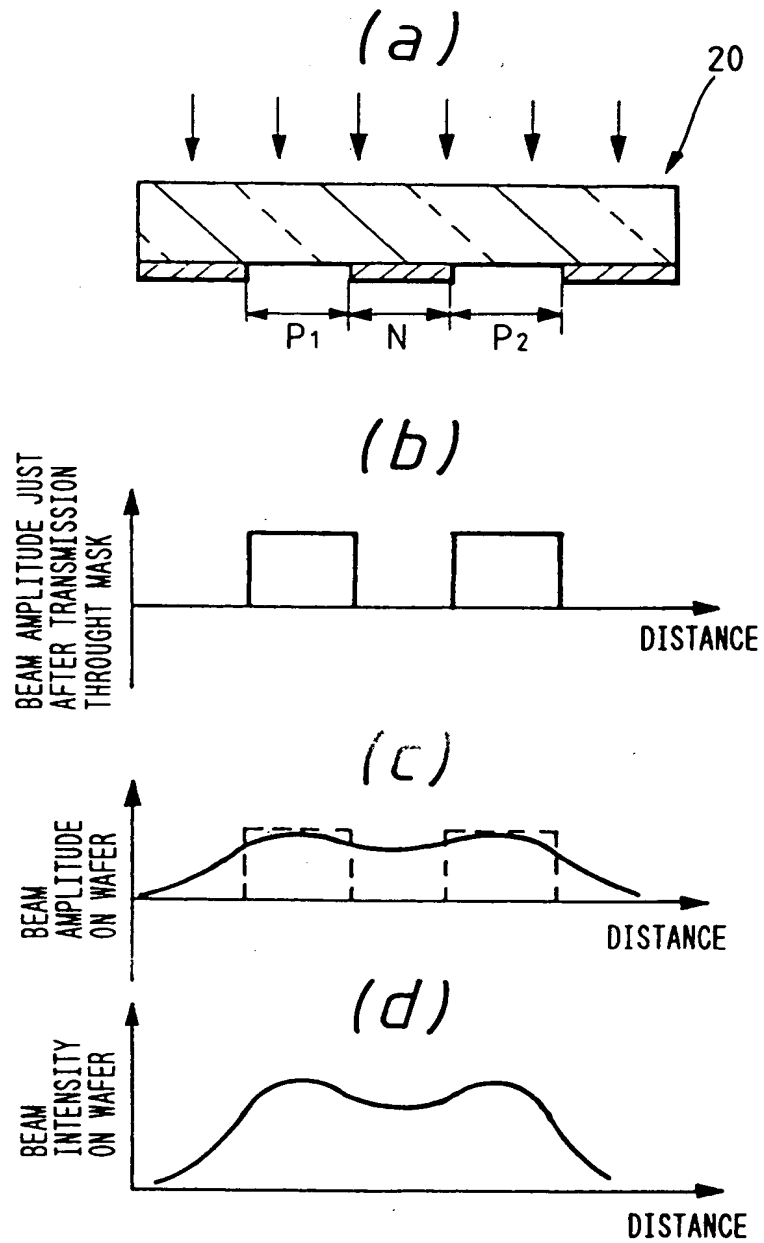
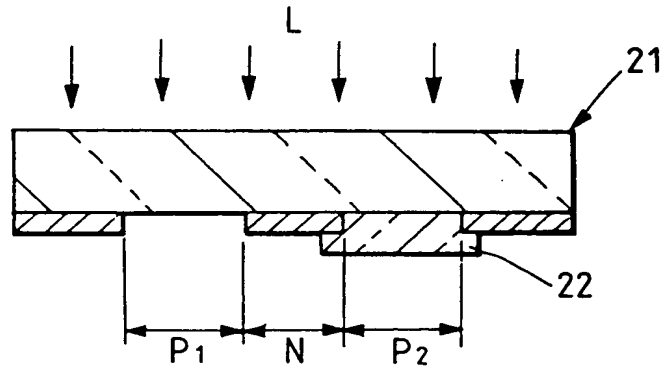
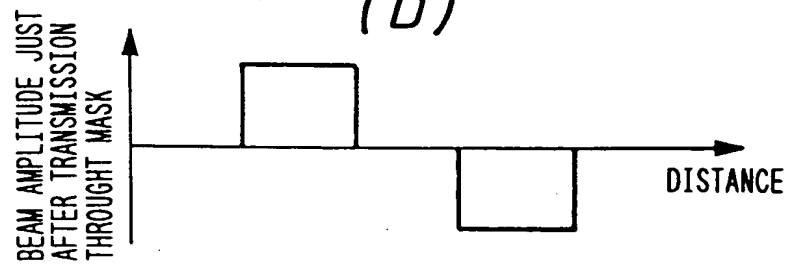


FIG. 1K

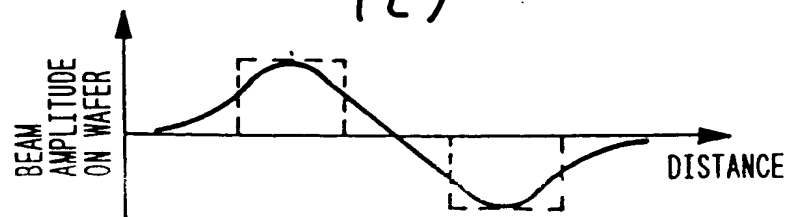
(a)



(b)



(c)



(d)

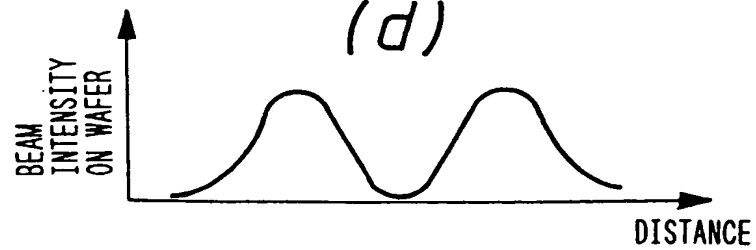
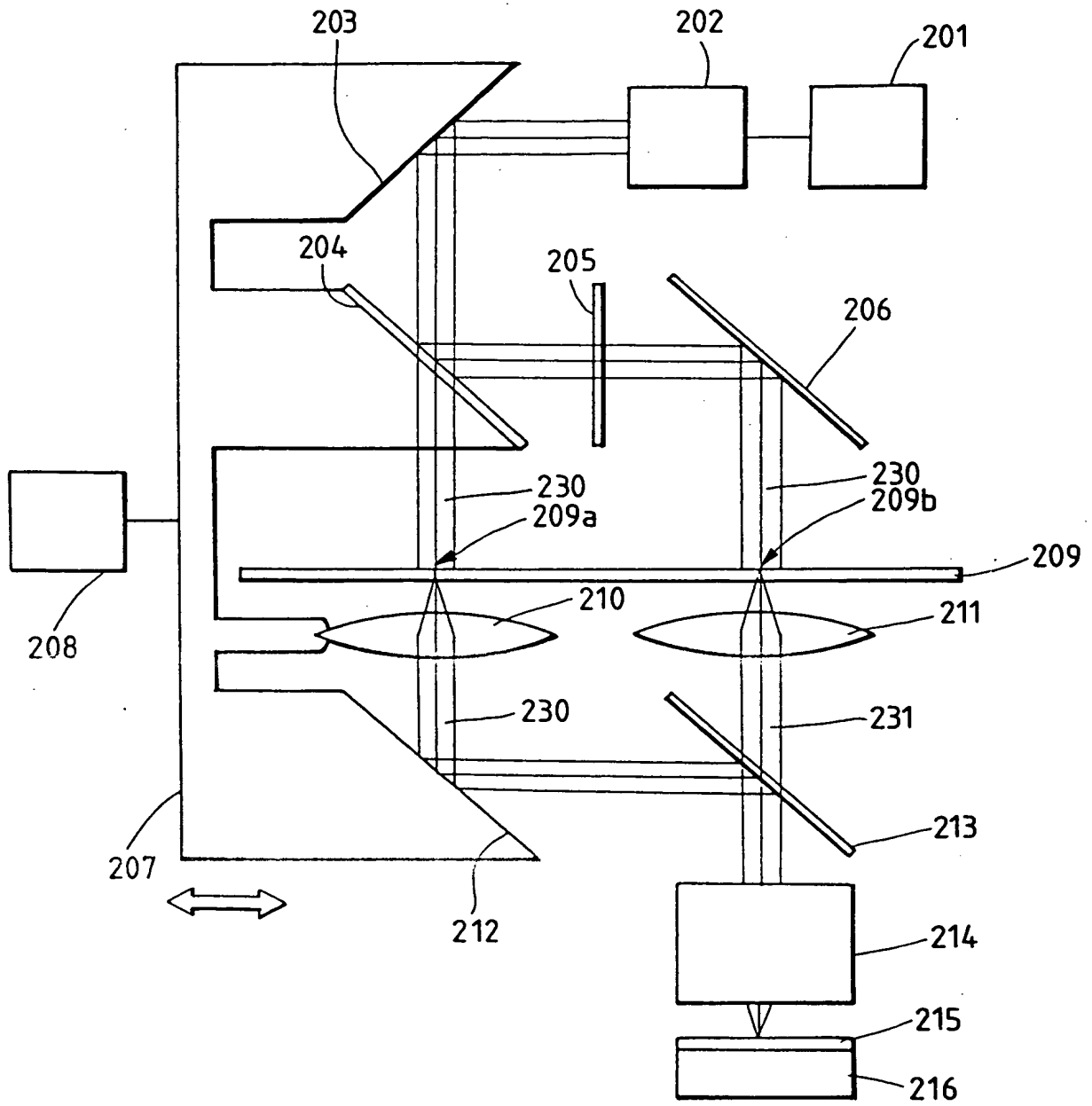


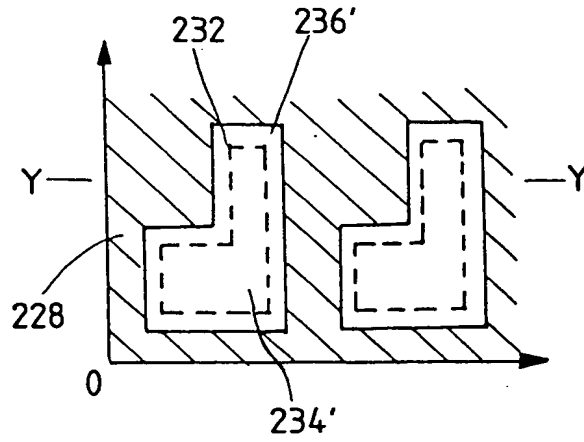
FIG. 2A



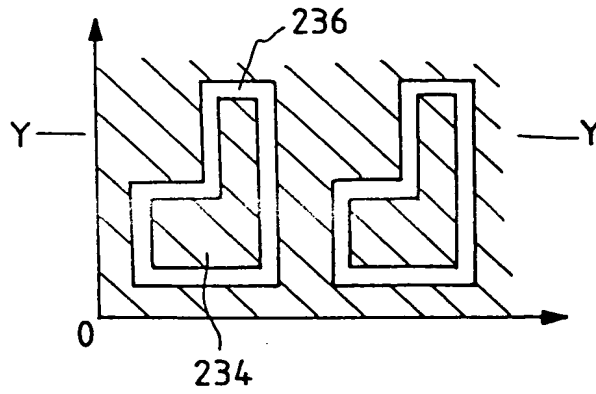
00022656 080704
FOZ080 55922660

FIG. 2B

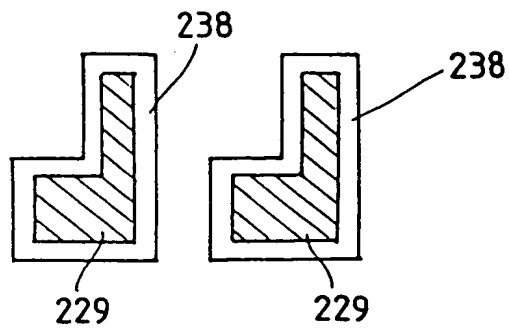
(a)



(b)



(c)



(b)

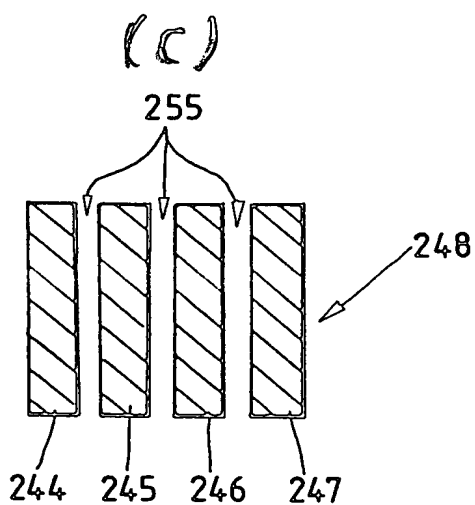
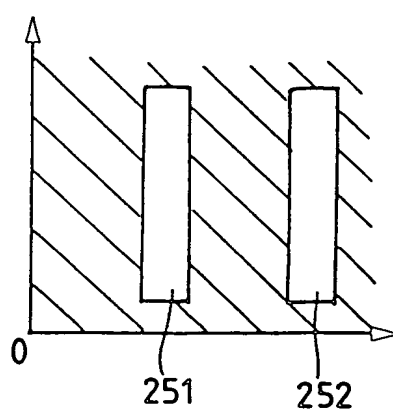
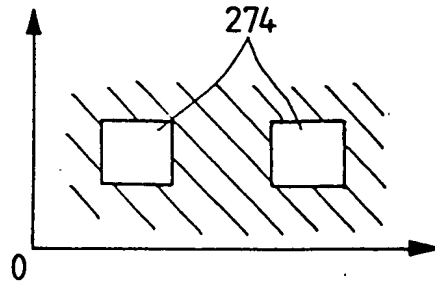
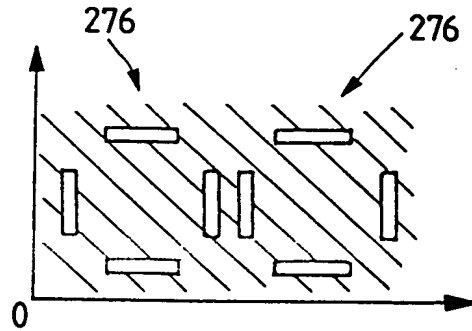


FIG. 2D

(a)



(b)



(c)

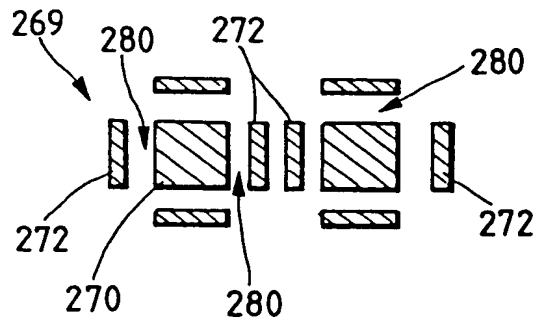
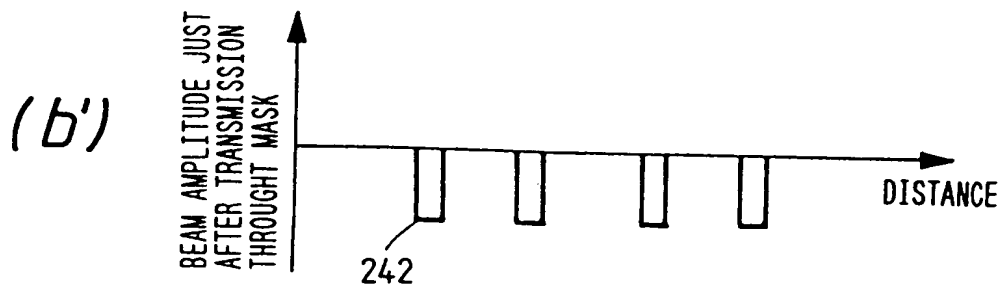
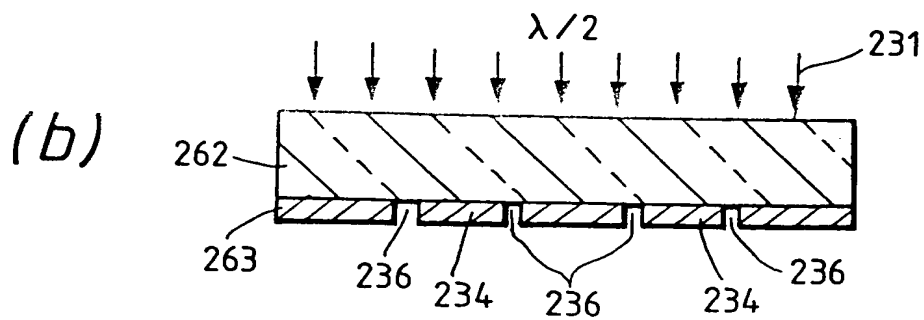
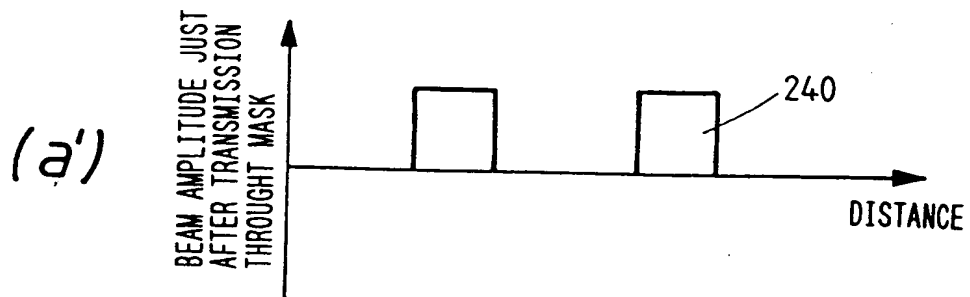
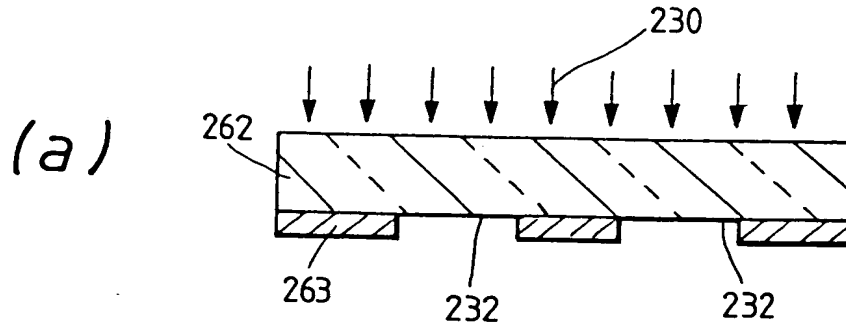


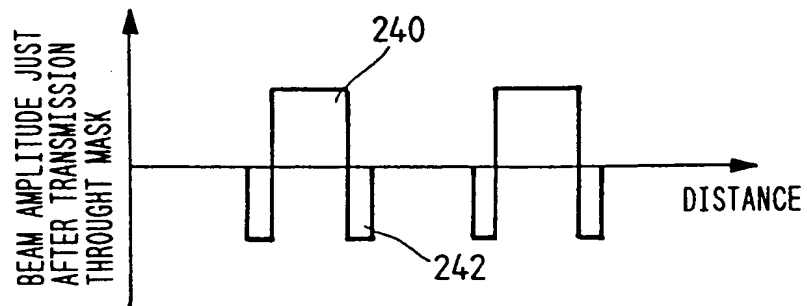
FIG. 2E



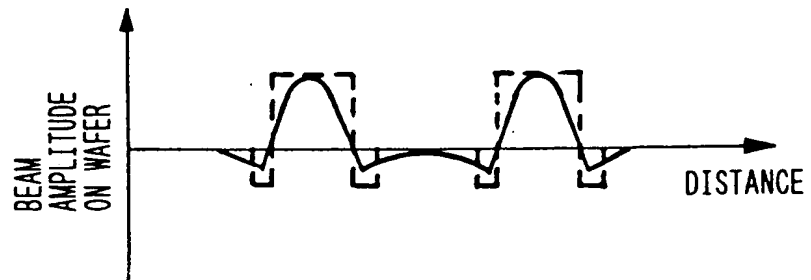
T02080 4592660

FIG. 2E

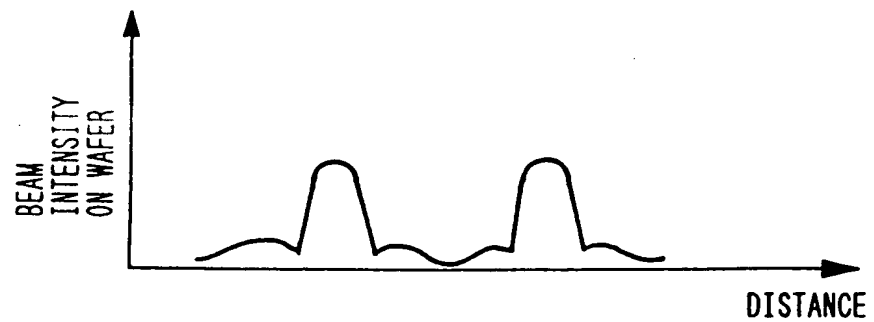
(c)



(d)



(e)



TOP SECRET

FIG. 2F

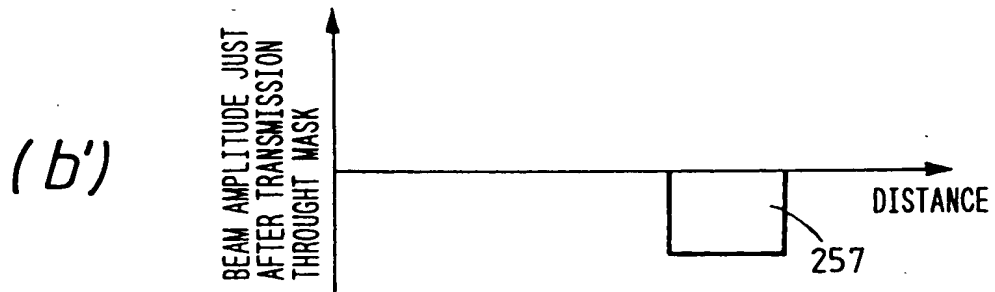
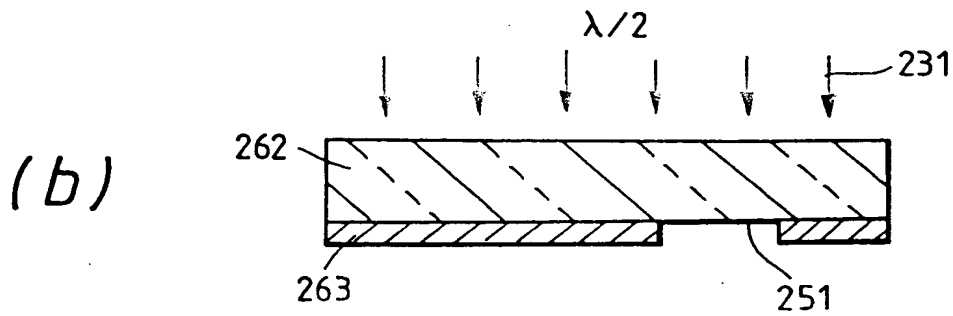
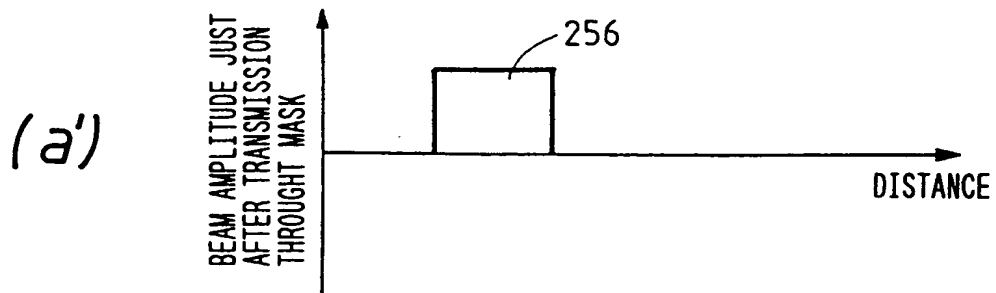
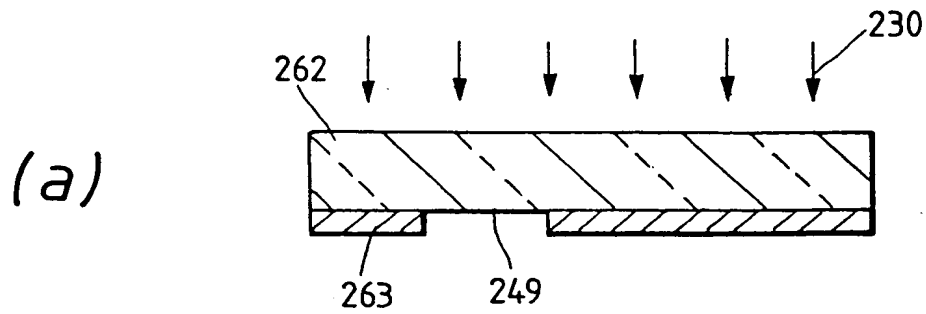


FIG. 2F

FIG. 2F

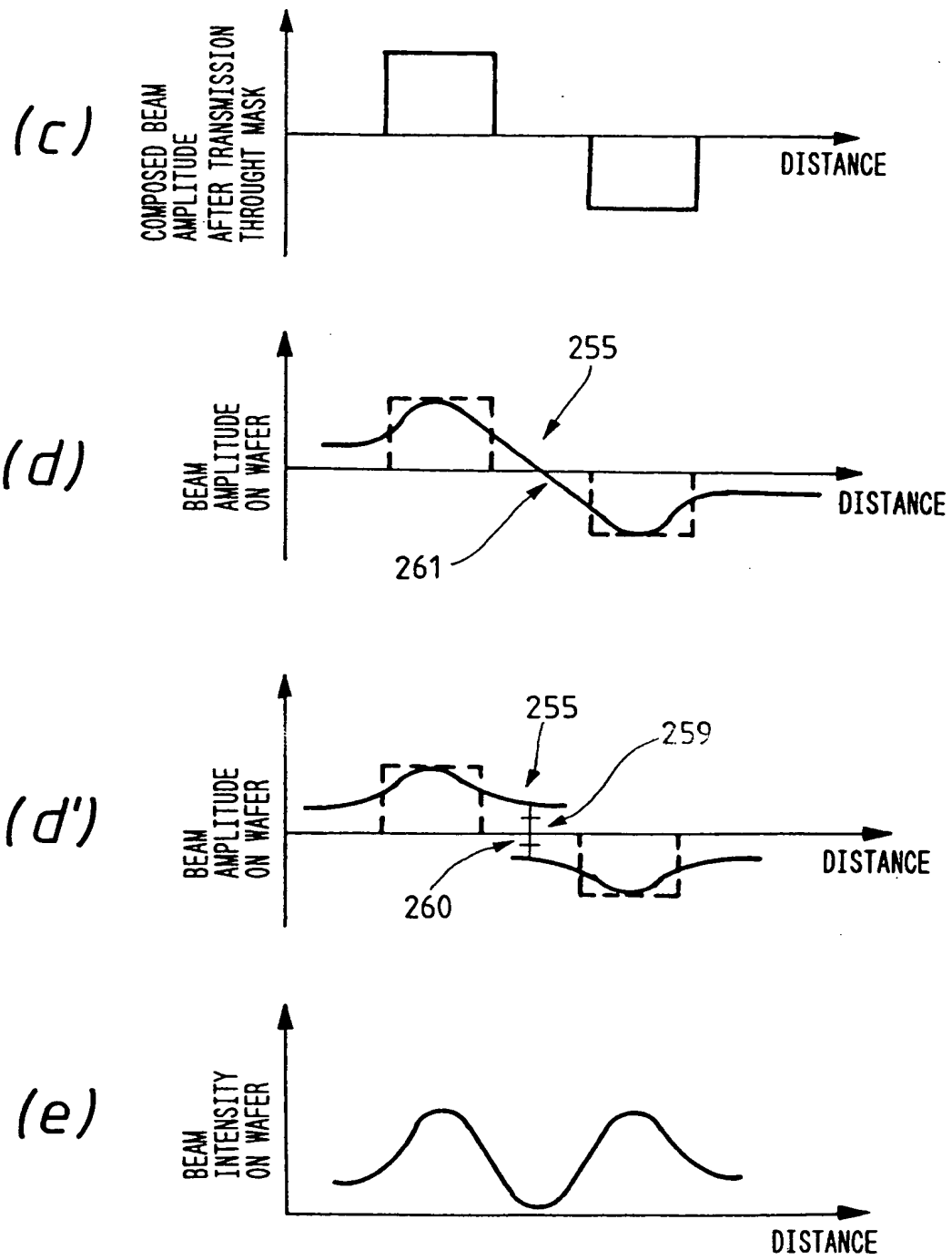
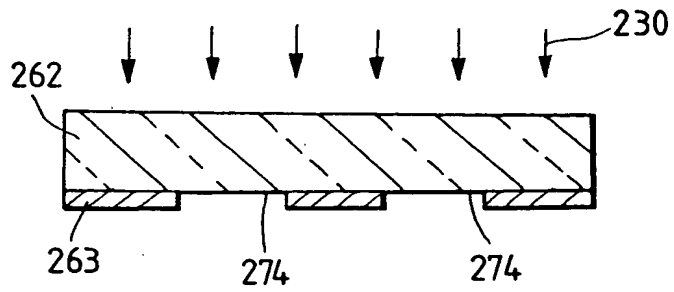
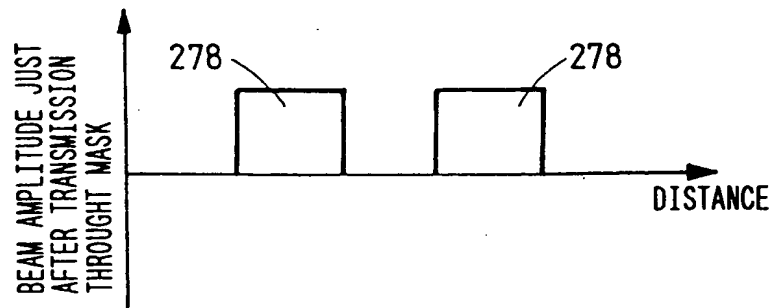


FIG. 2G

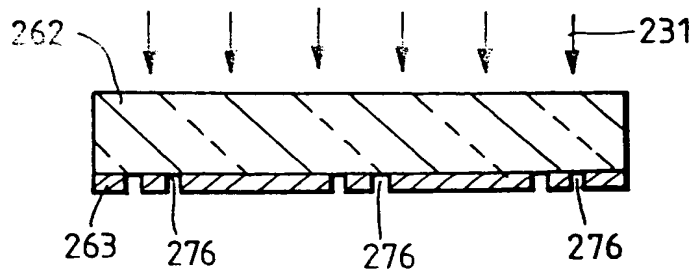
(a)



(a')



(b)



(b')

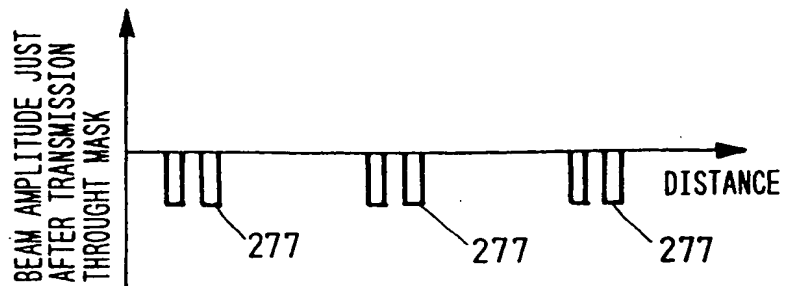


FIG. 2G

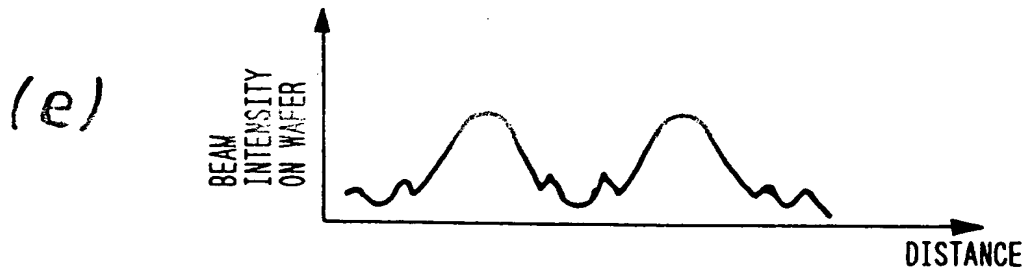
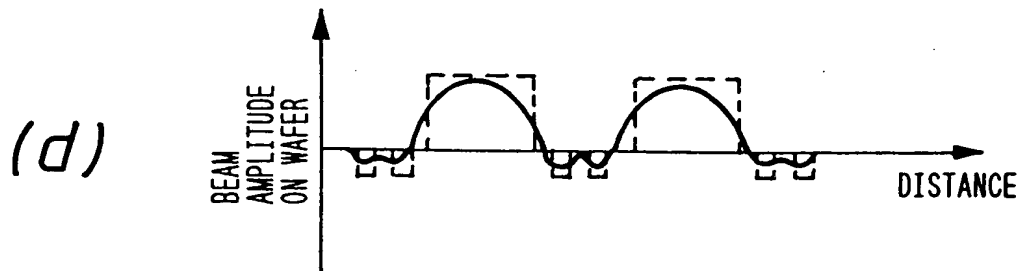
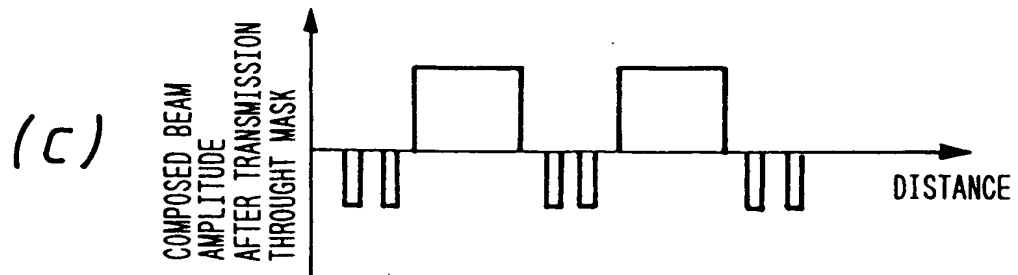


FIG. 2H

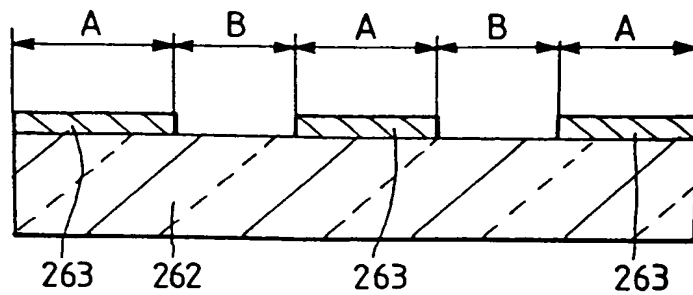
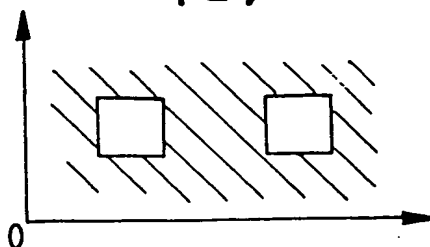
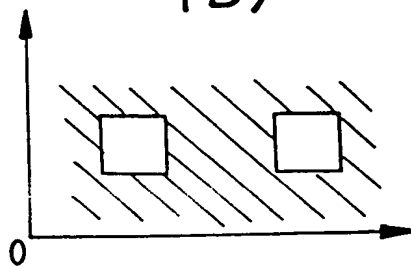


FIG. 2I

(a)



(b)



(c)

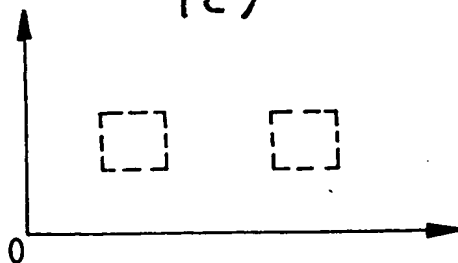
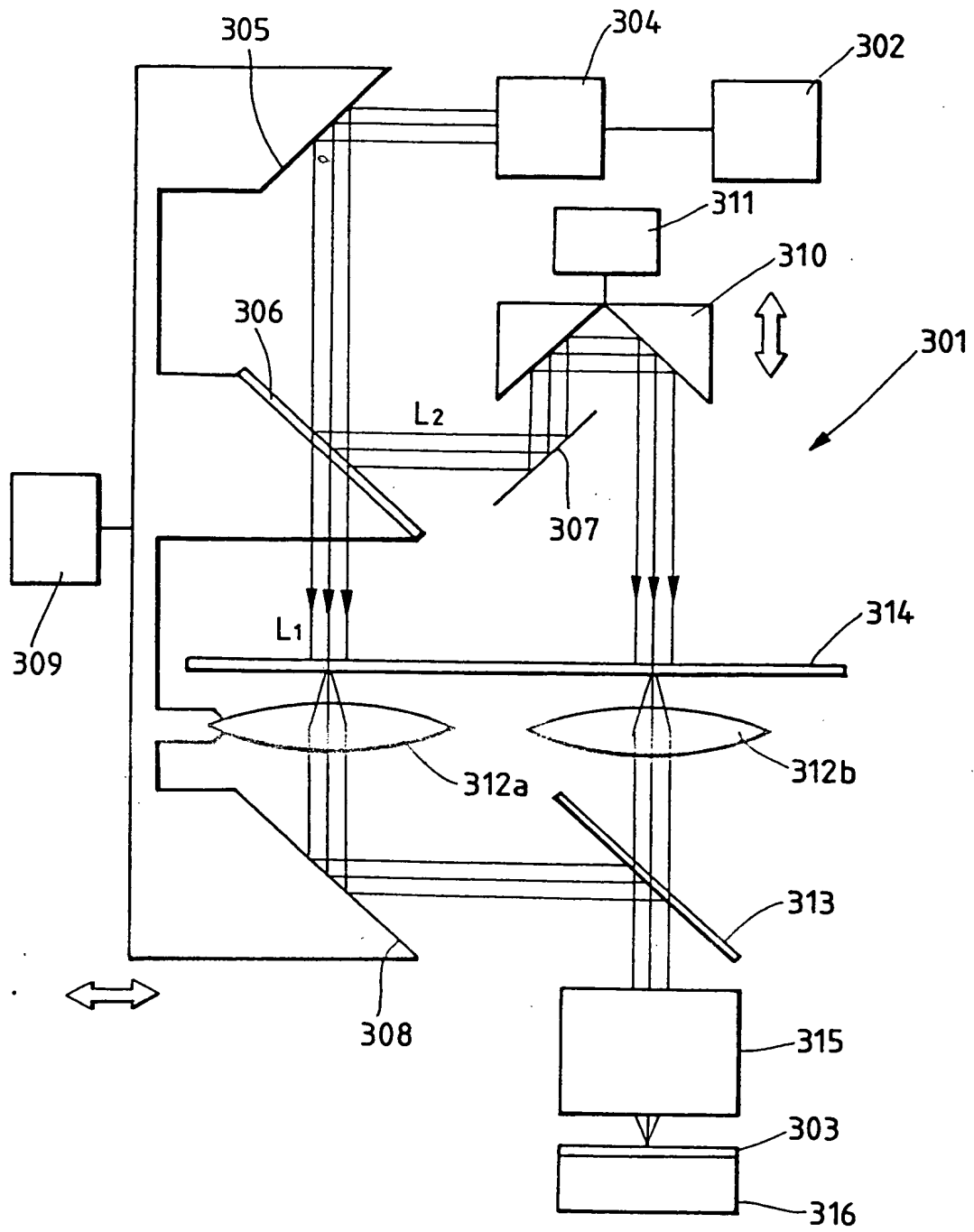


FIG. 3A



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FIG. 3B

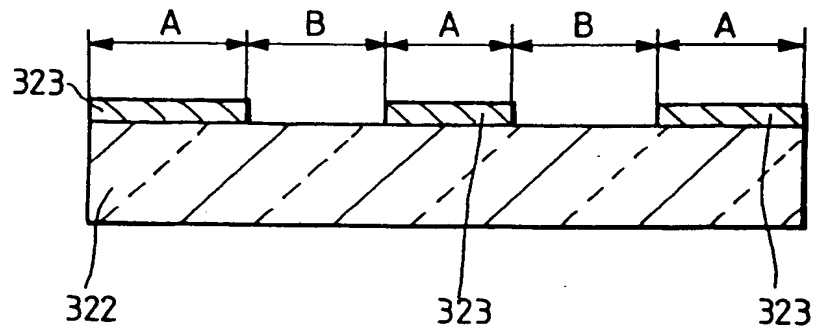


FIG. 3D

DEPENDENCY ON FOCAL POSITION

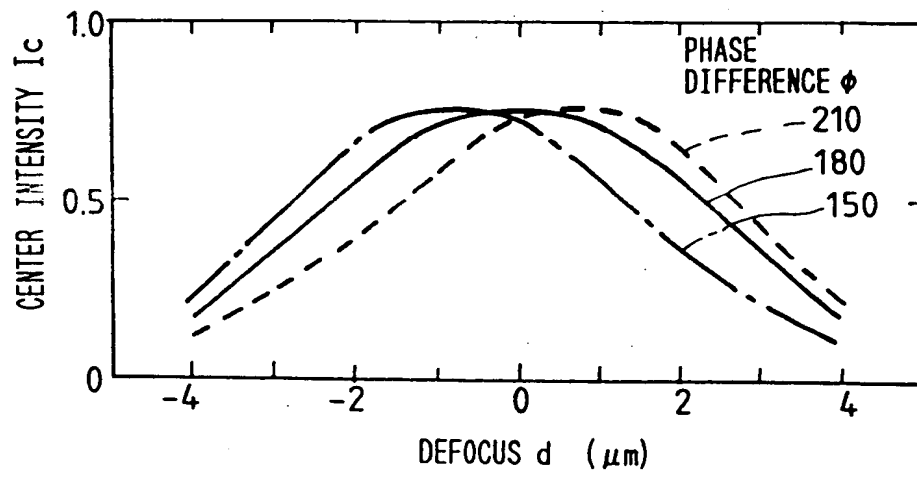


FIG. 3C

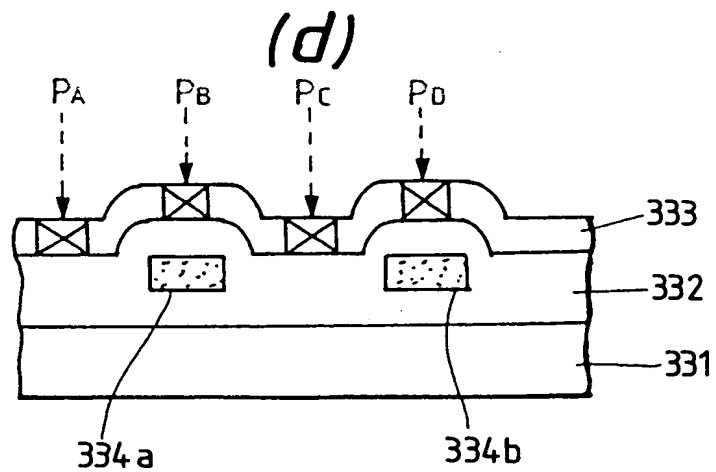
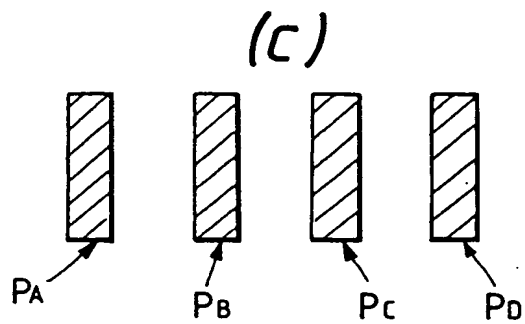
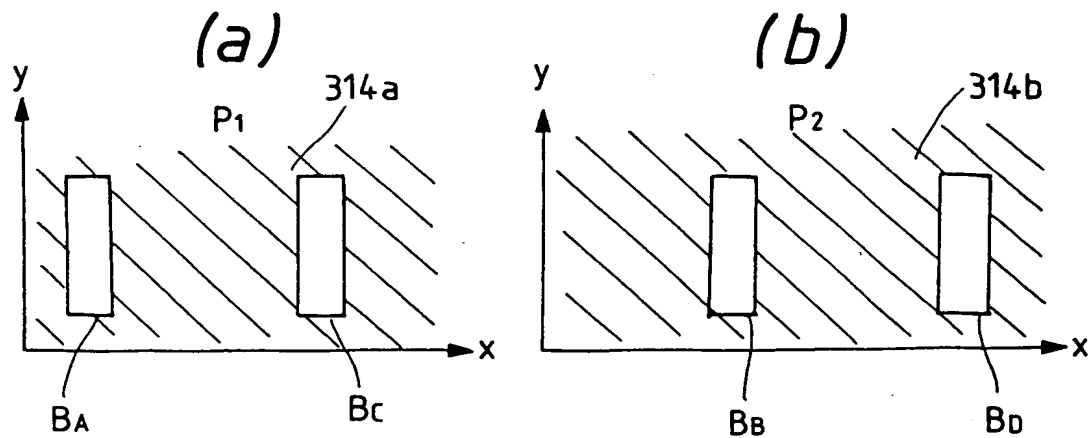
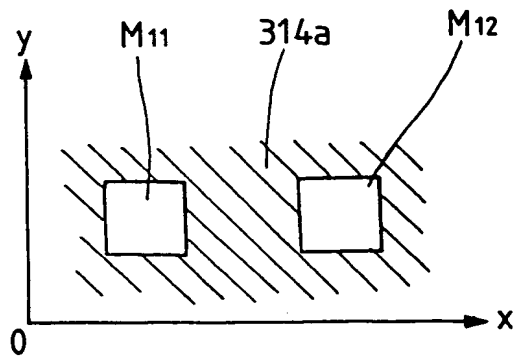


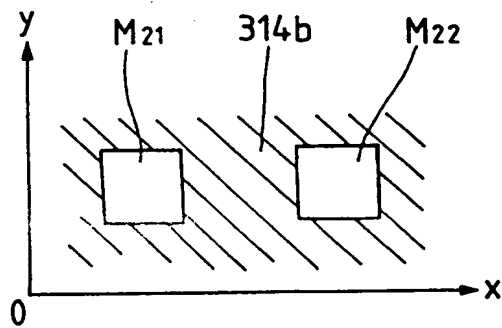
FIG. 3E

FIG. 3E

(a)



(b)



(c)

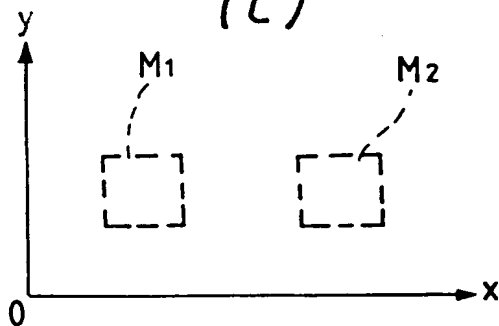


FIG. 4A

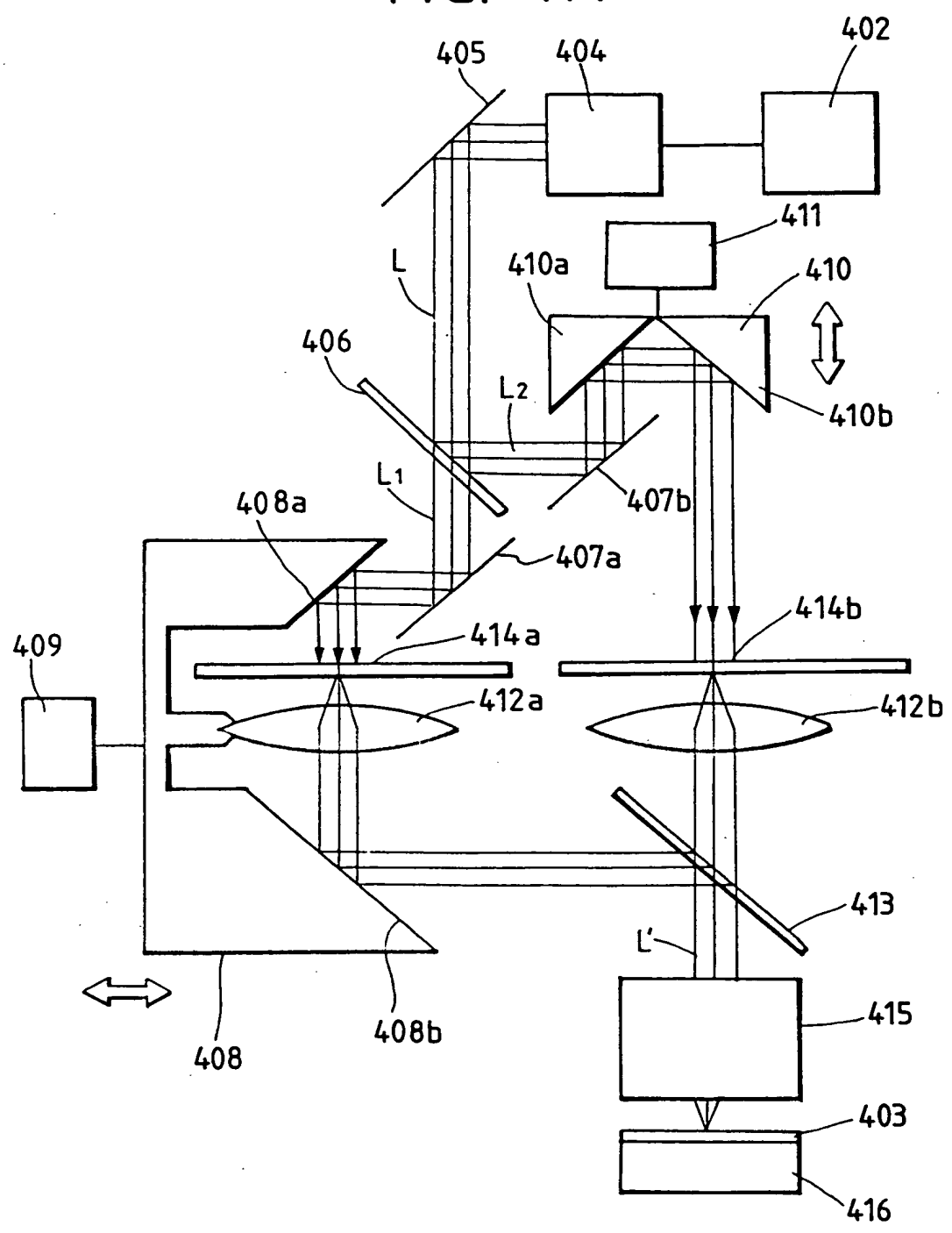


FIG. 5A

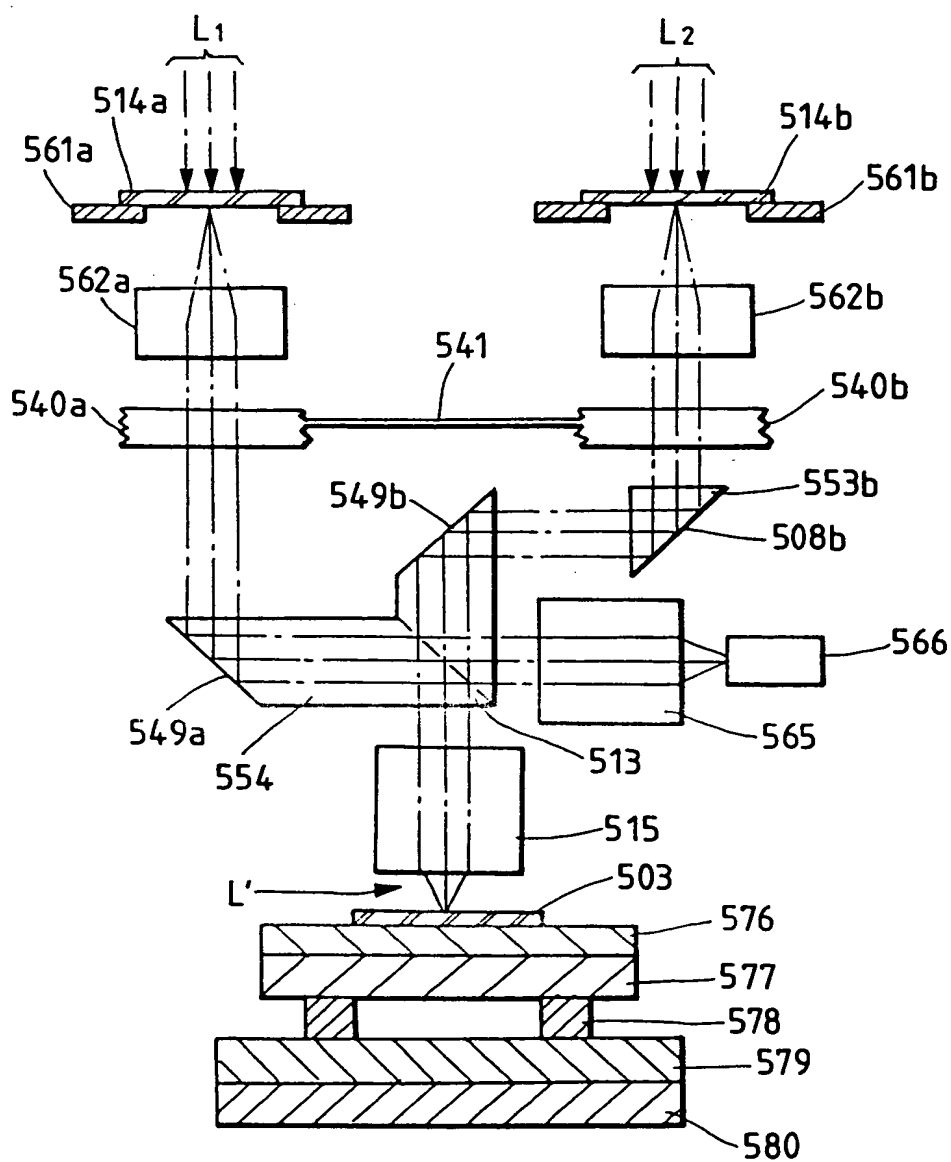


FIG. 5B

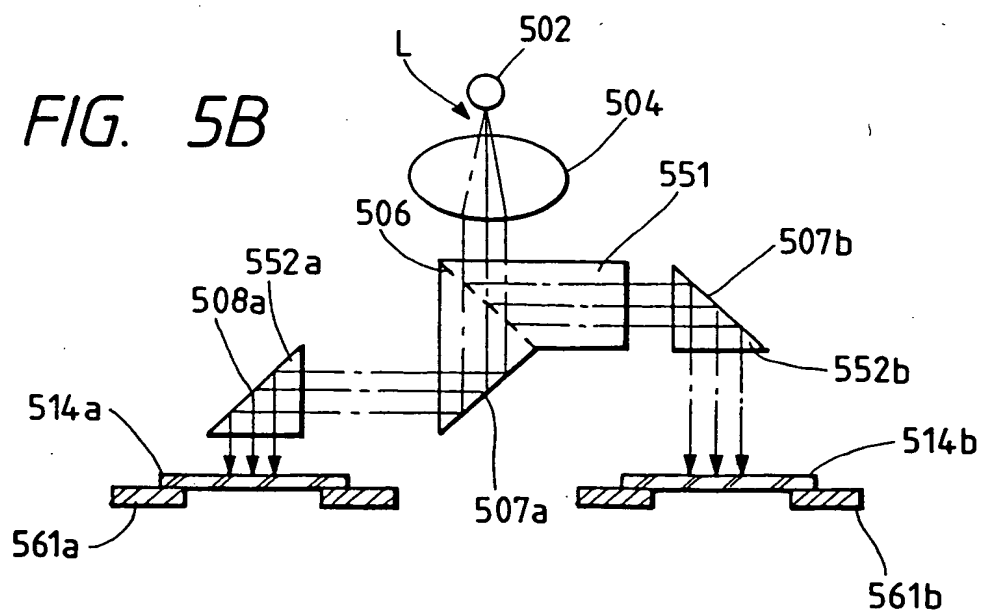


FIG. 5C

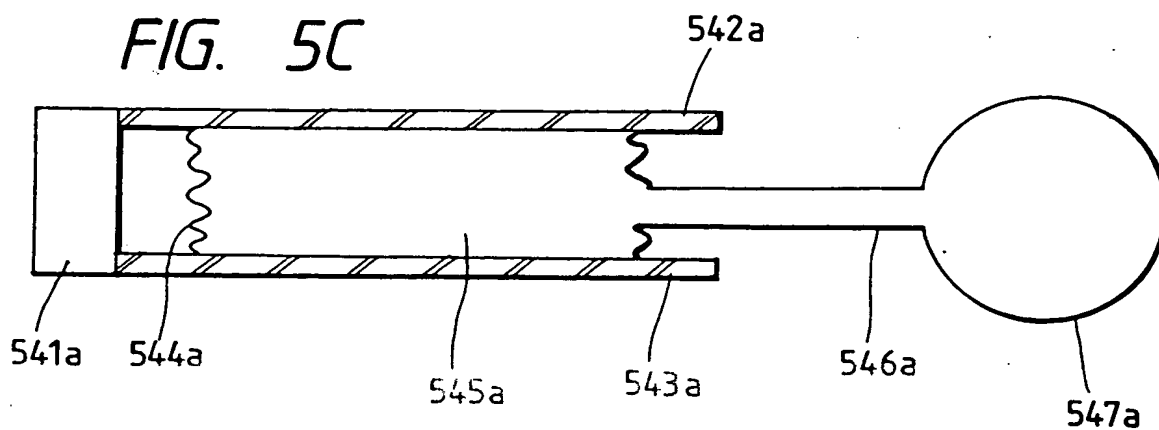


FIG. 5D

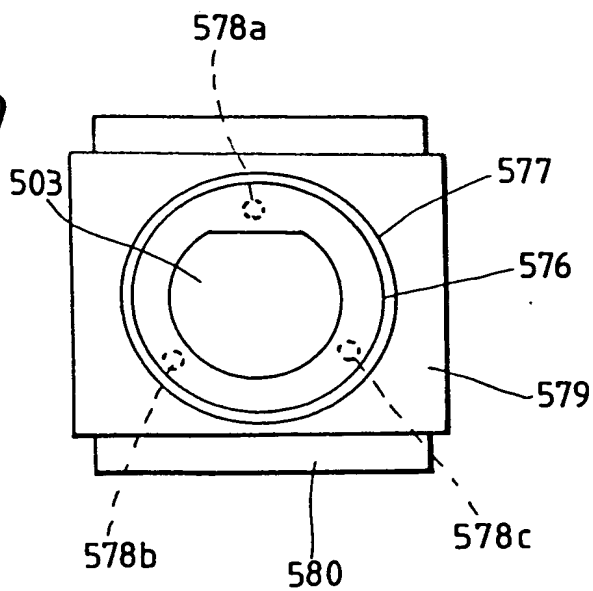


FIG. 6A

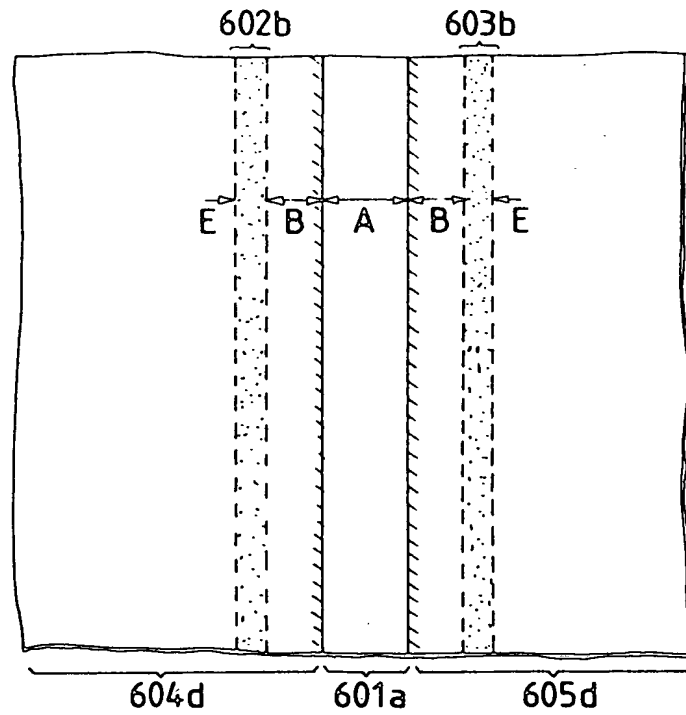


FIG. 6B

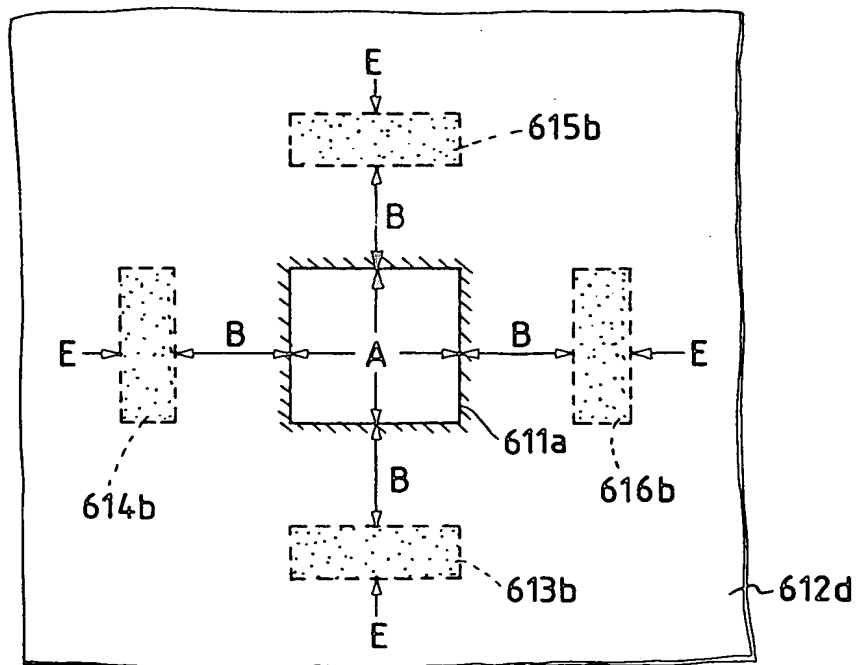


FIG. 6C

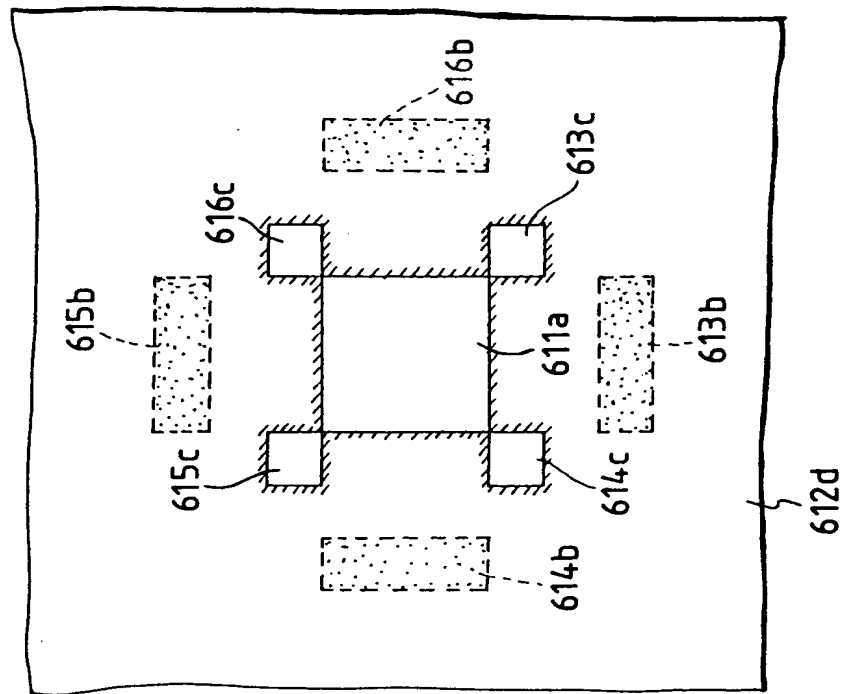


FIG. 6D

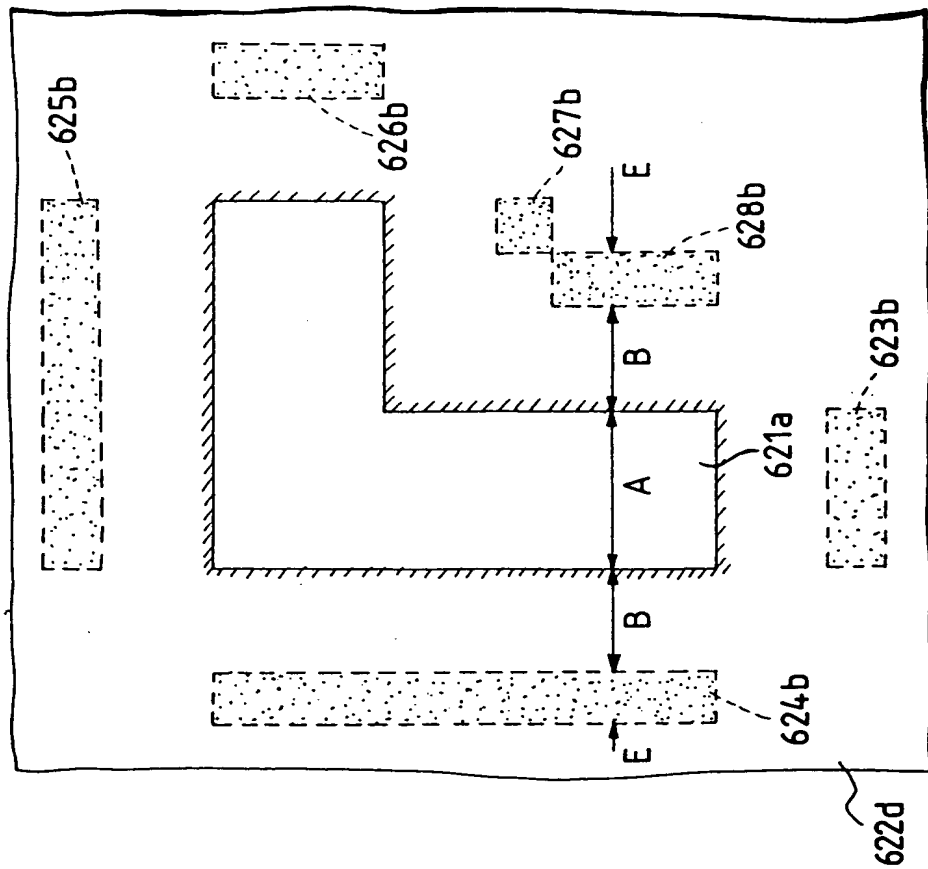


FIG. 6E

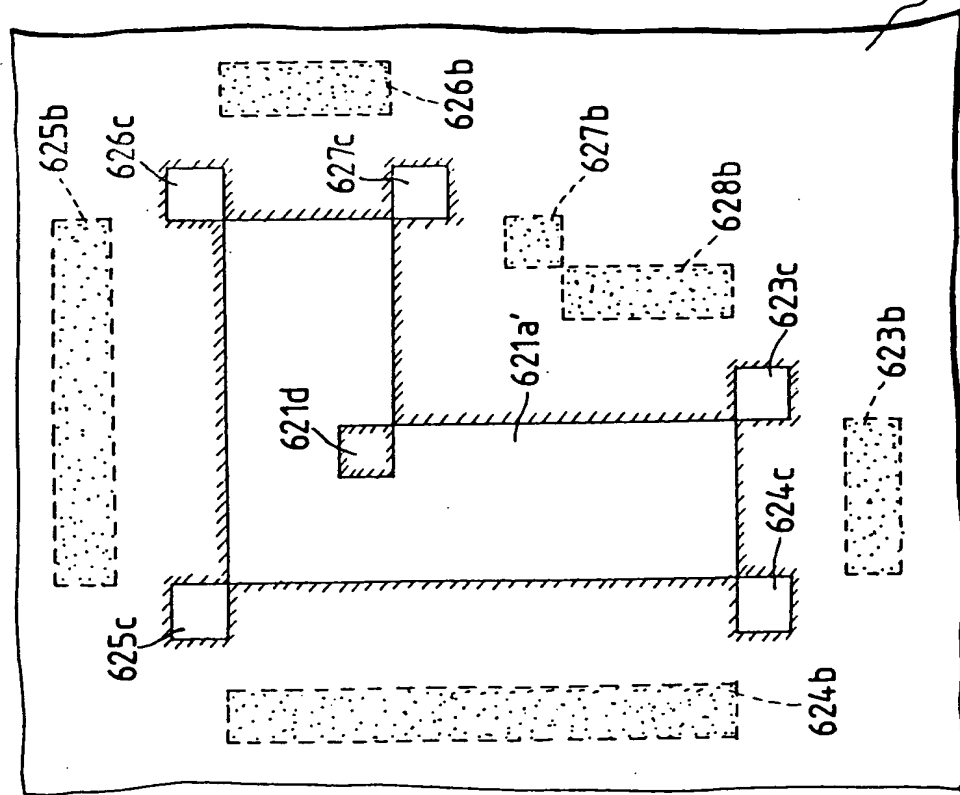


FIG. 6F

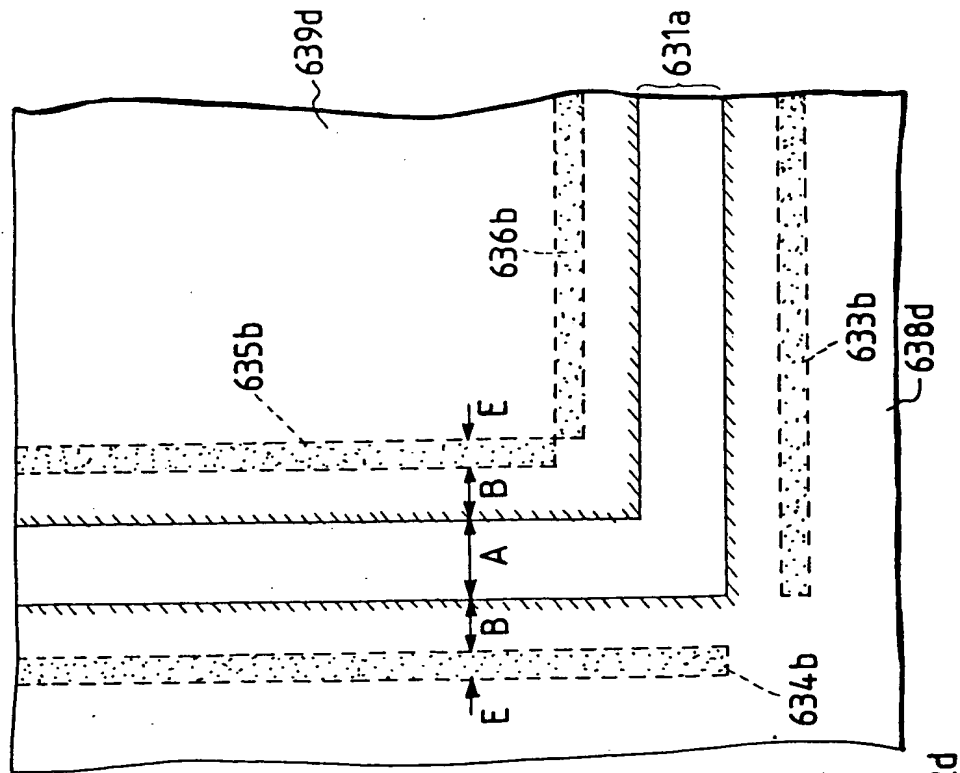


FIG. 6G

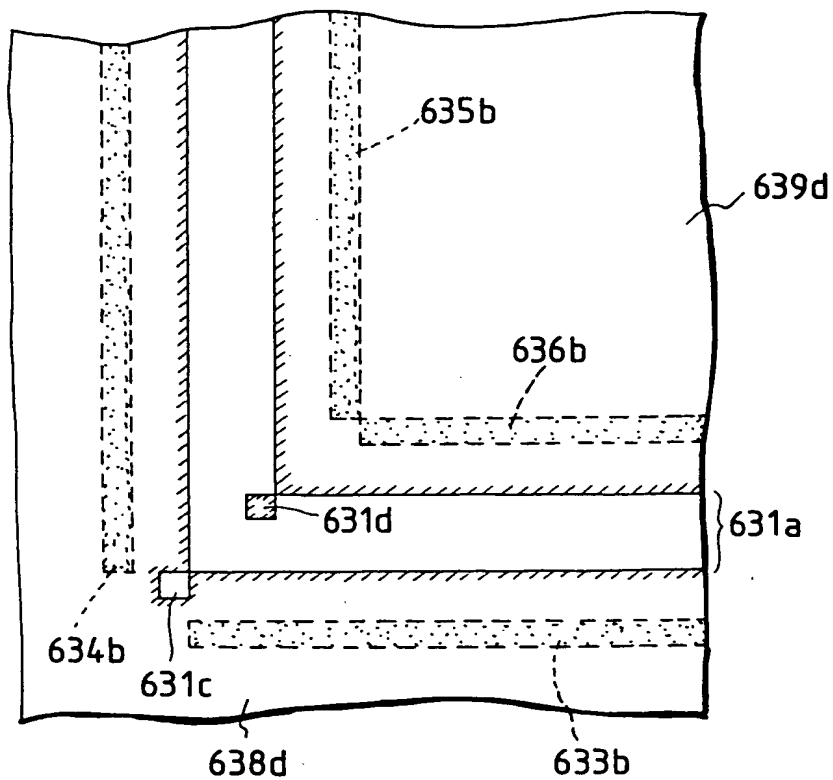
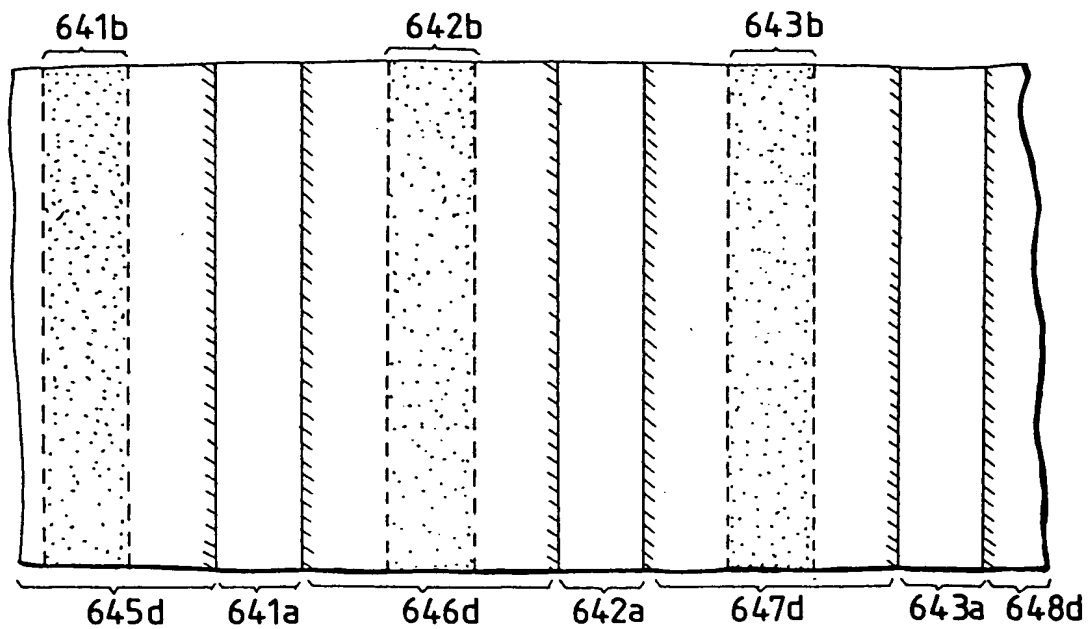


FIG. 6H



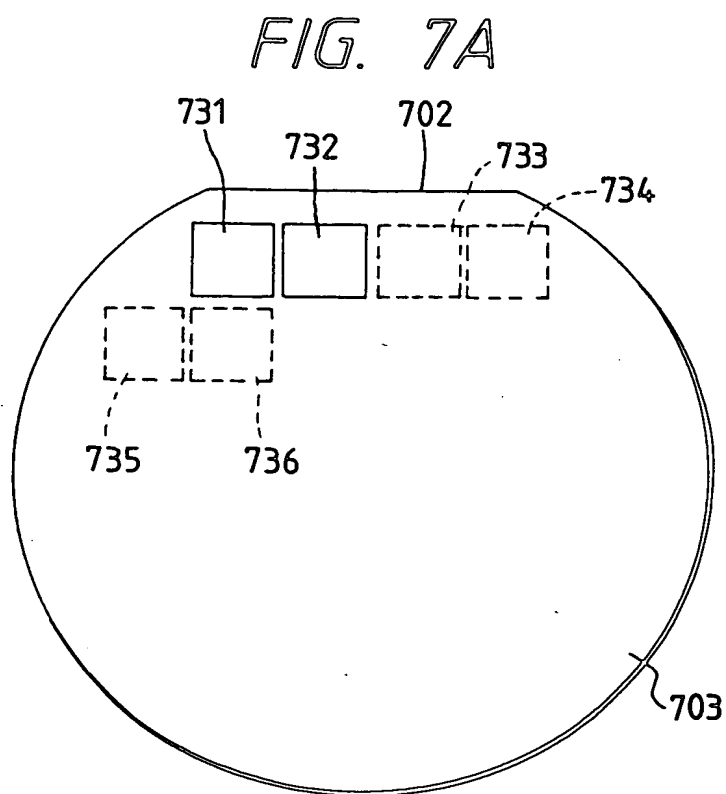


FIG. 7B

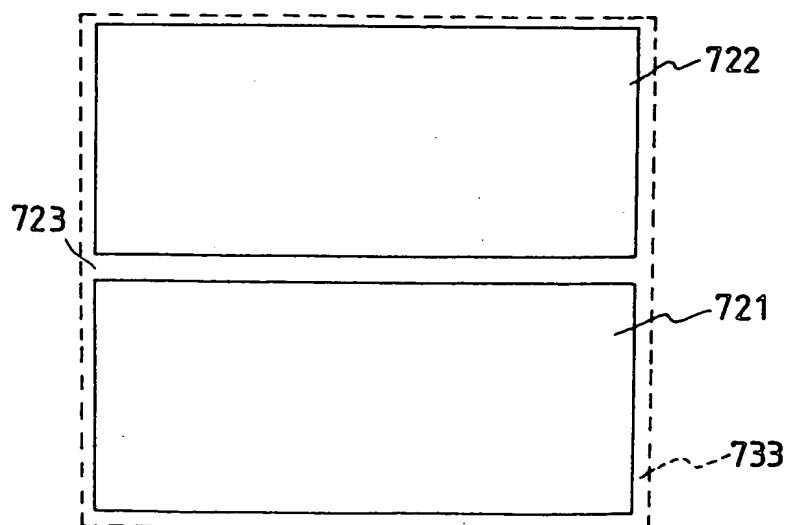
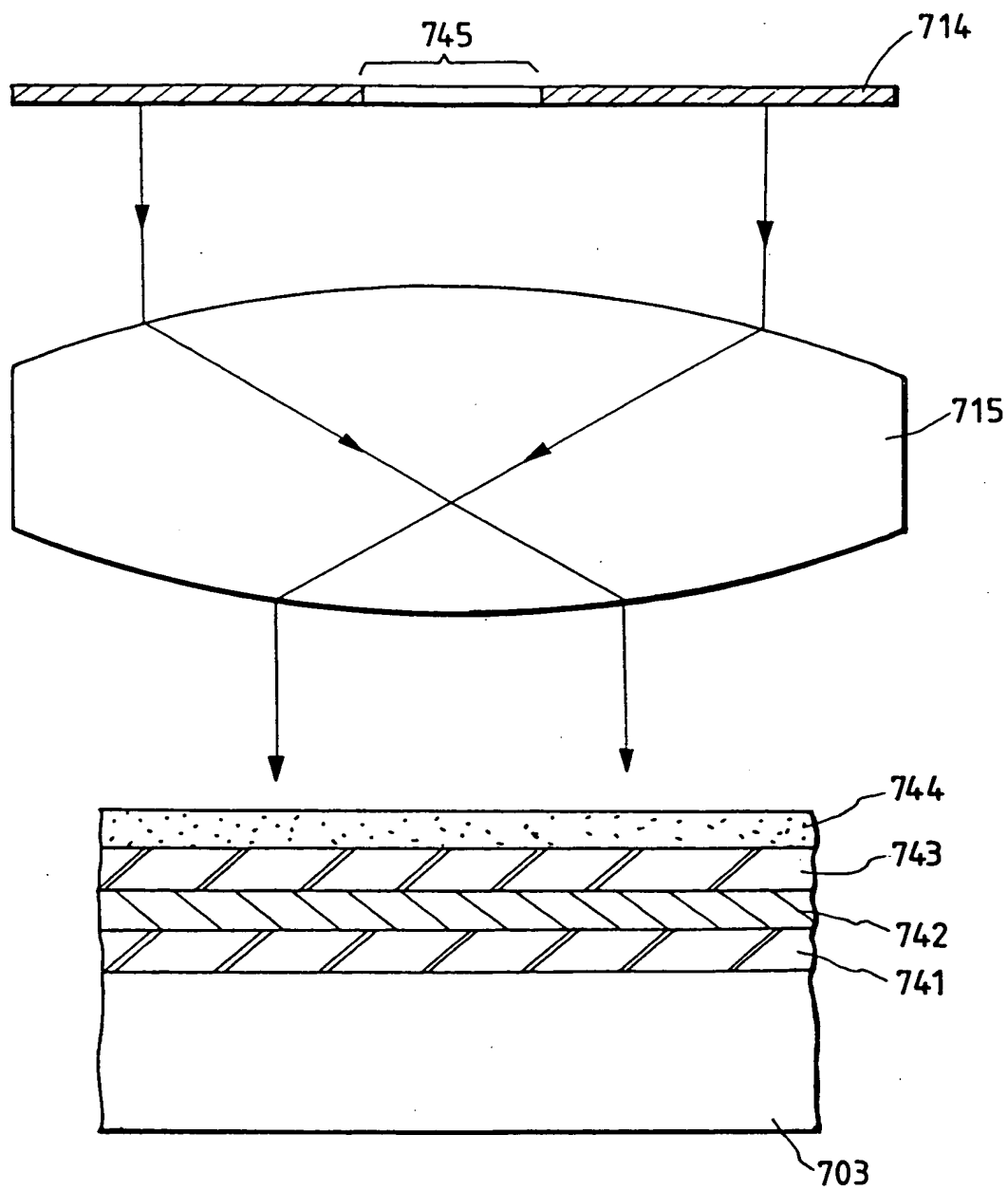


FIG. 7C



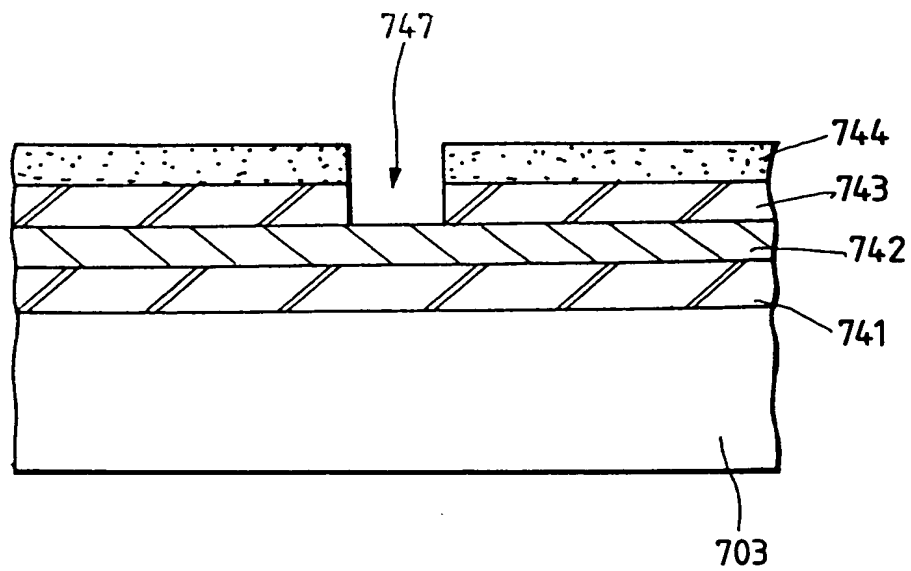


FIG. 7F

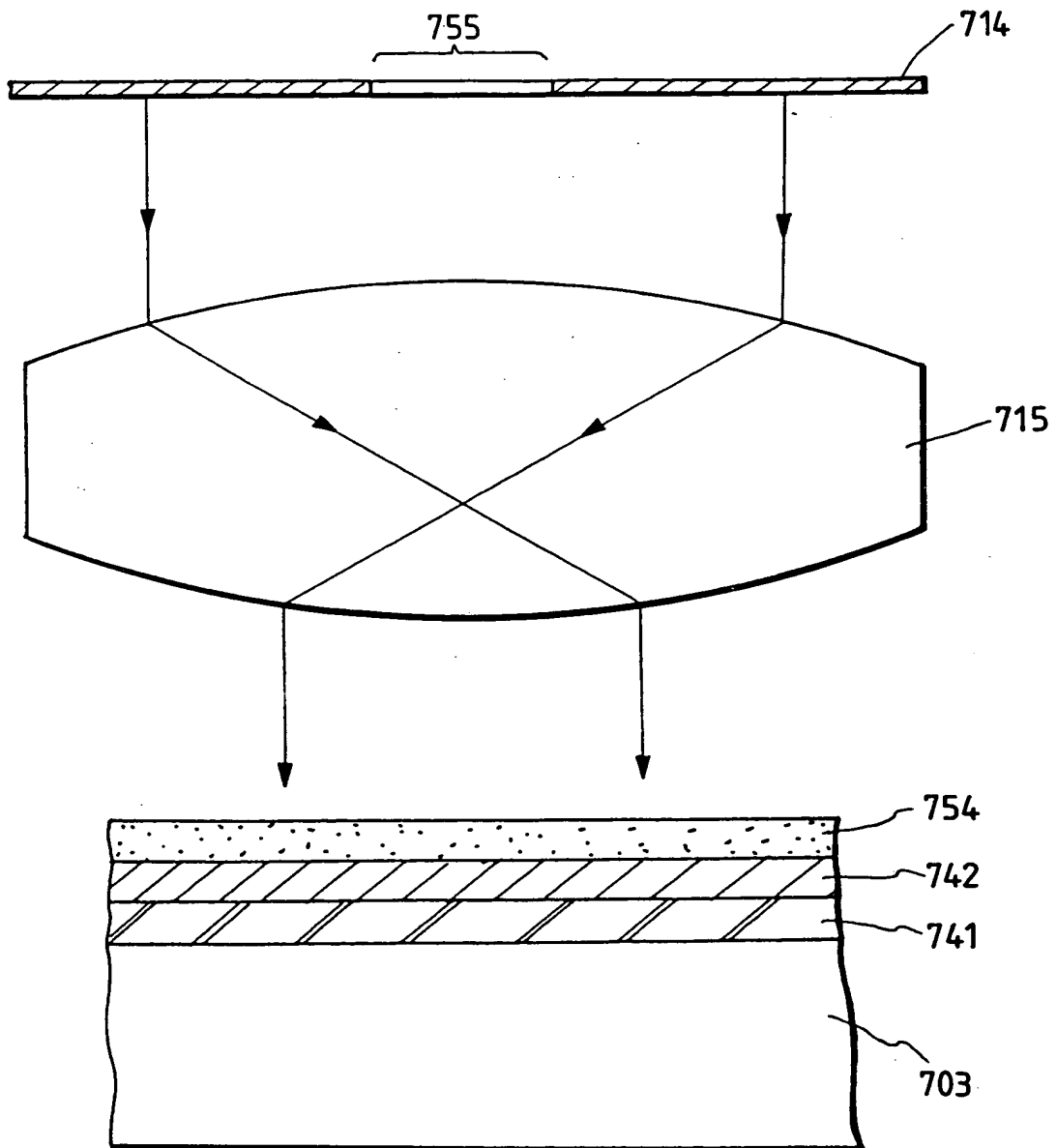


FIG. 7G

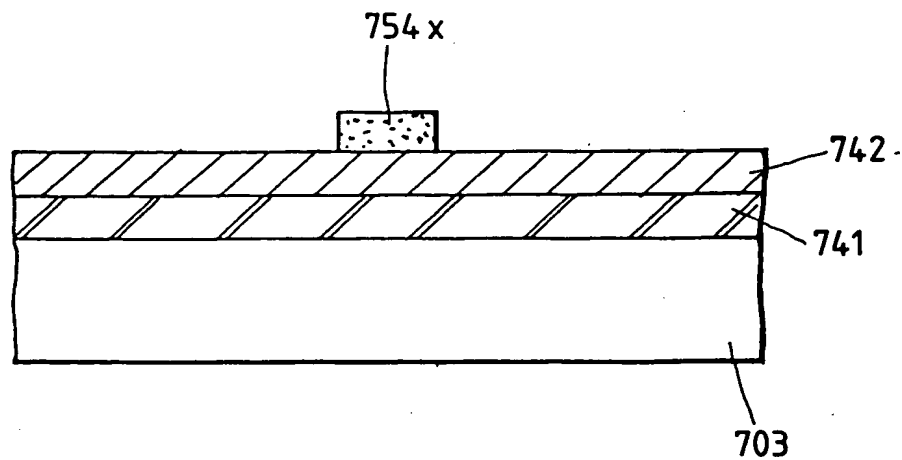


FIG. 7H

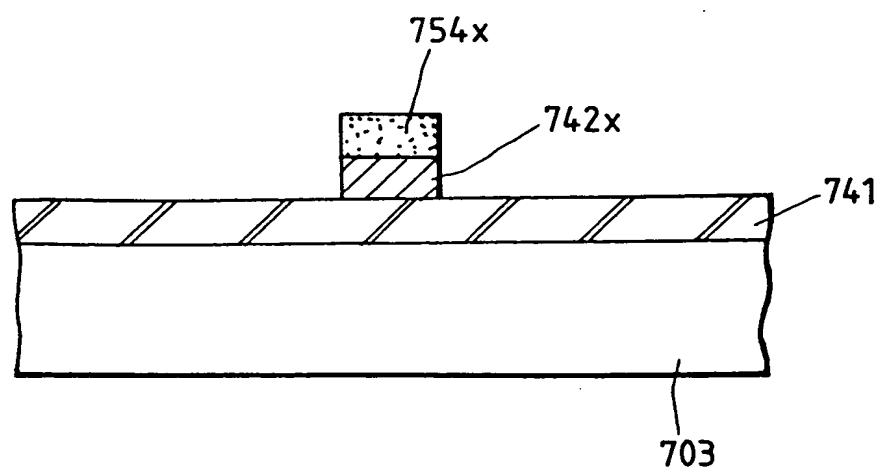


FIG. 7I

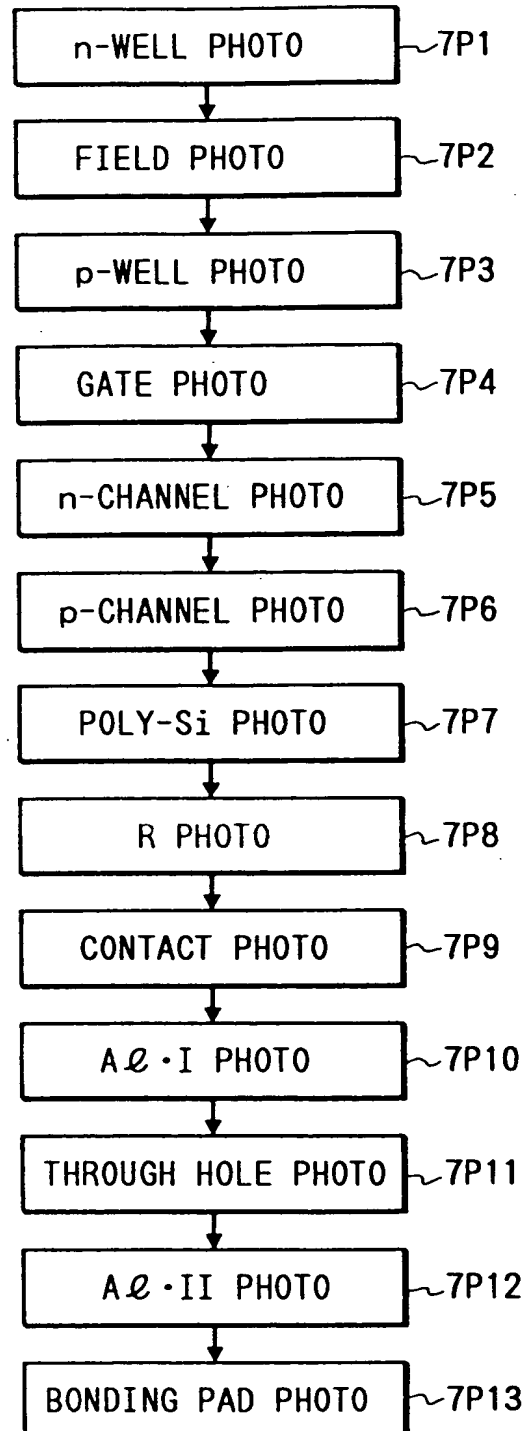


FIG. 7J

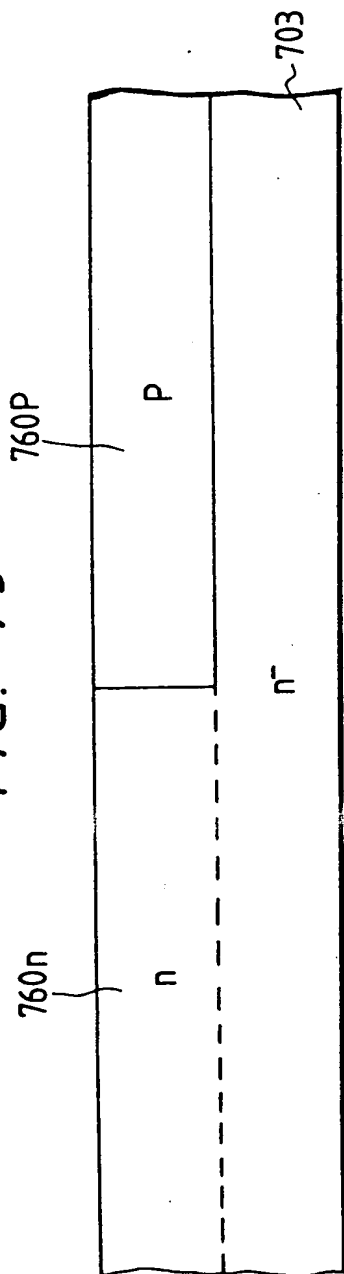


FIG. 7K

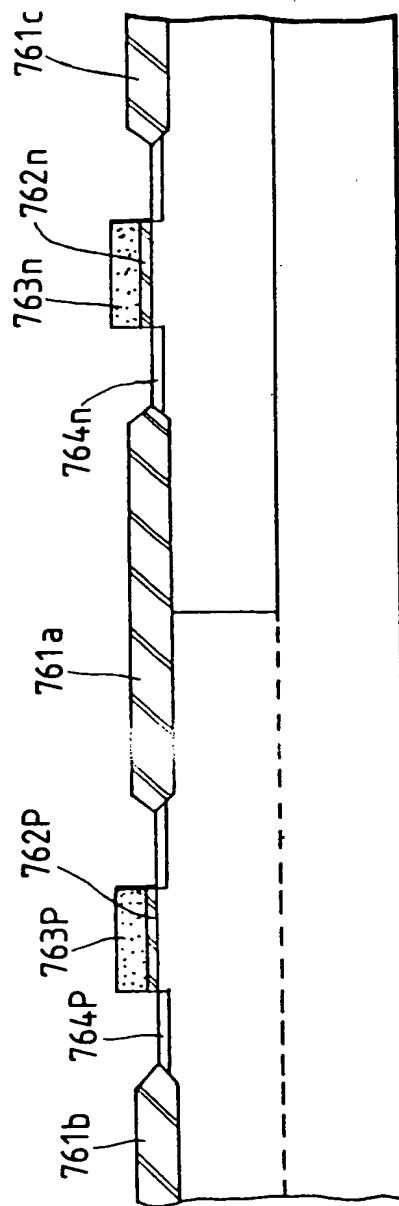


FIG. 7L

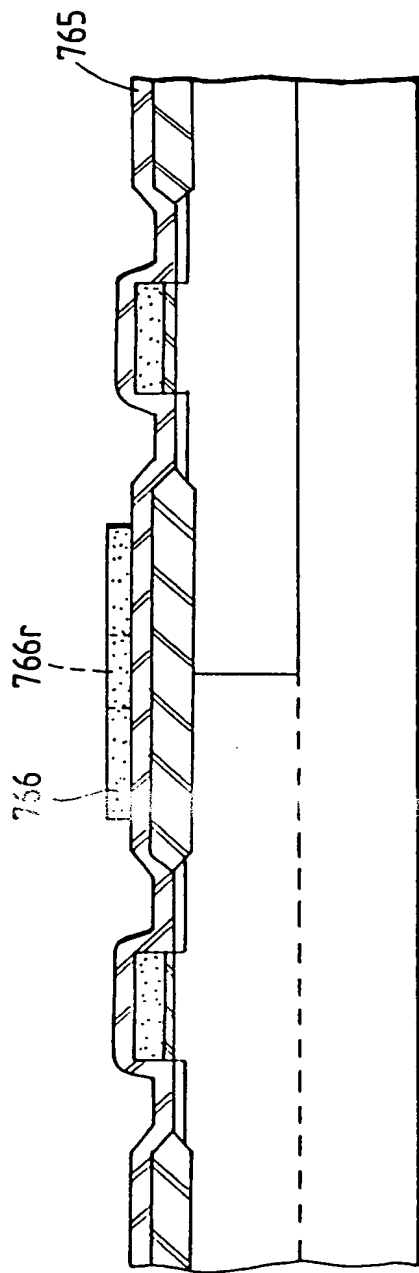


FIG. 7M

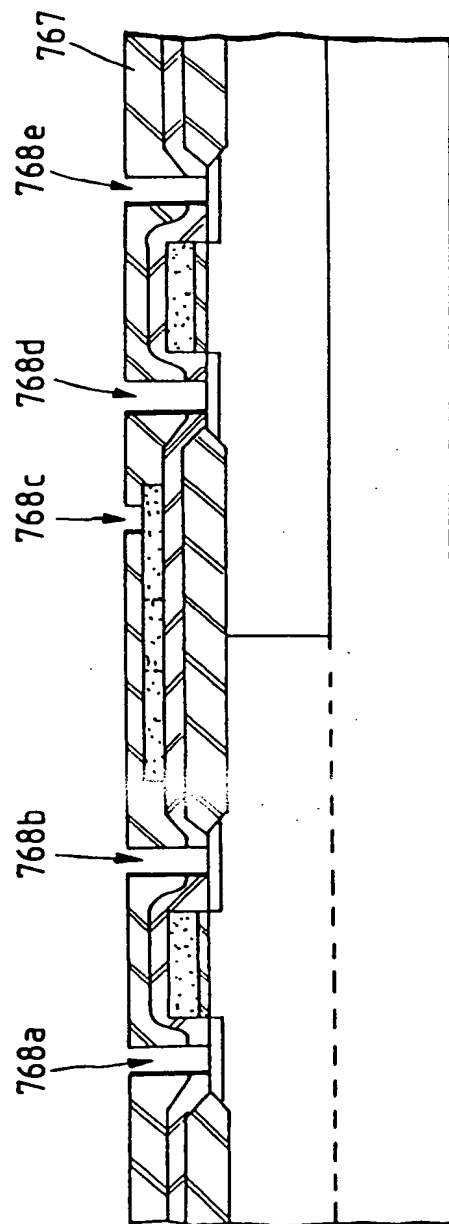


FIG. 7N

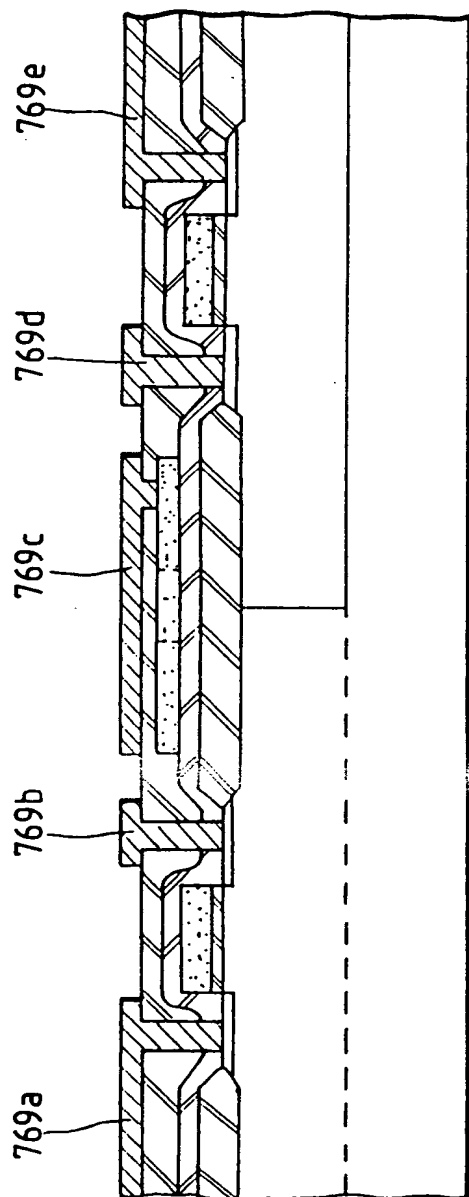
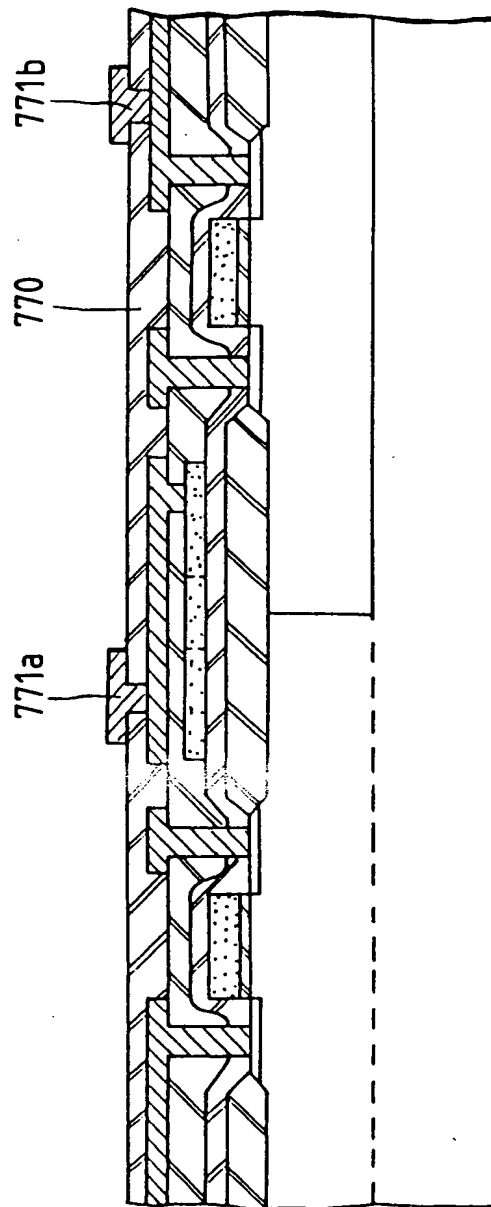


FIG. 70



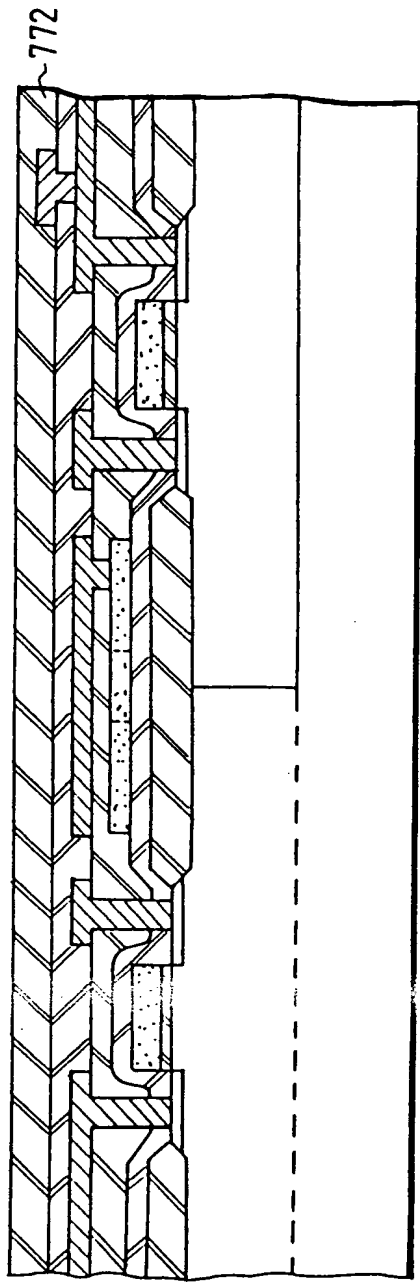


FIG. 7P

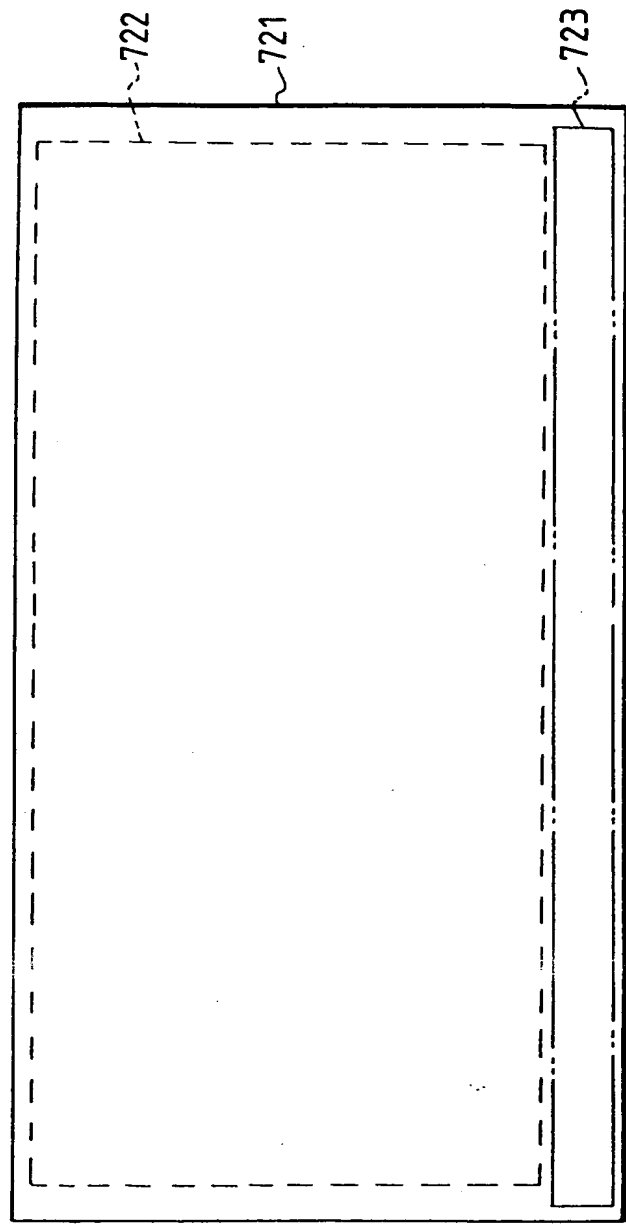


FIG. 7Q

FIG. 8A

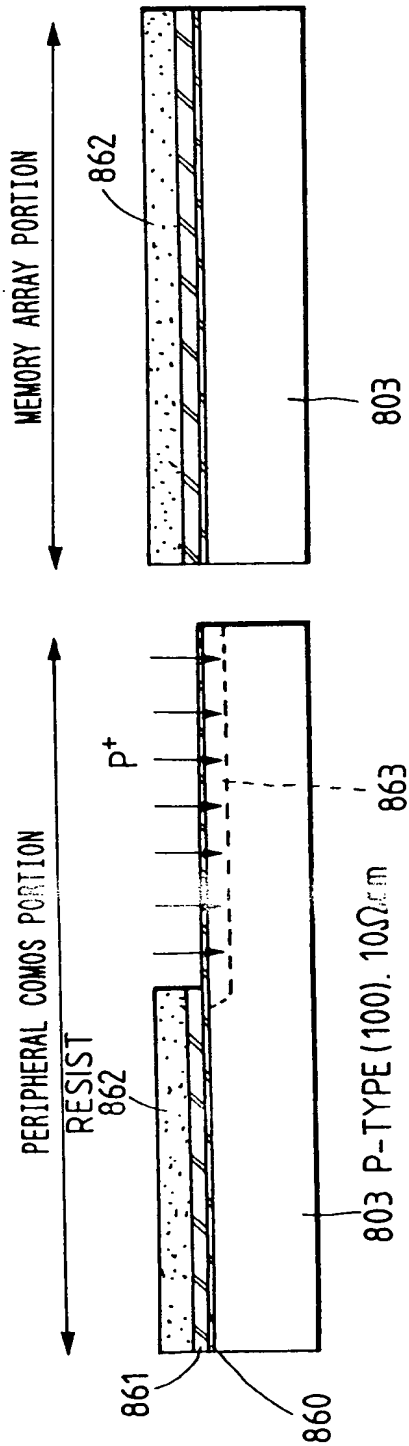


FIG. 8B

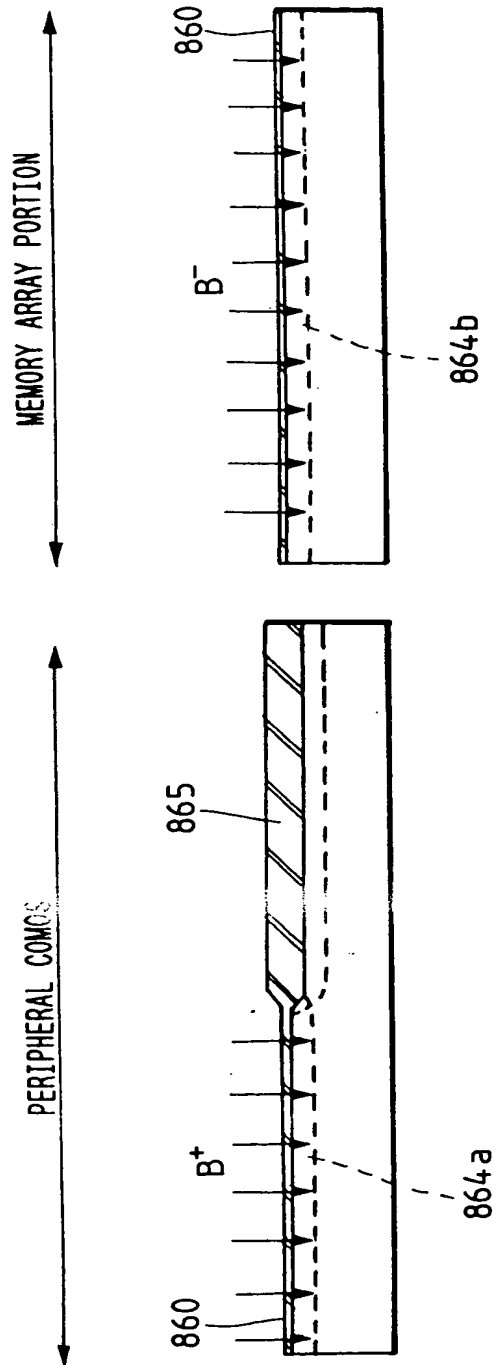


FIG. 8C

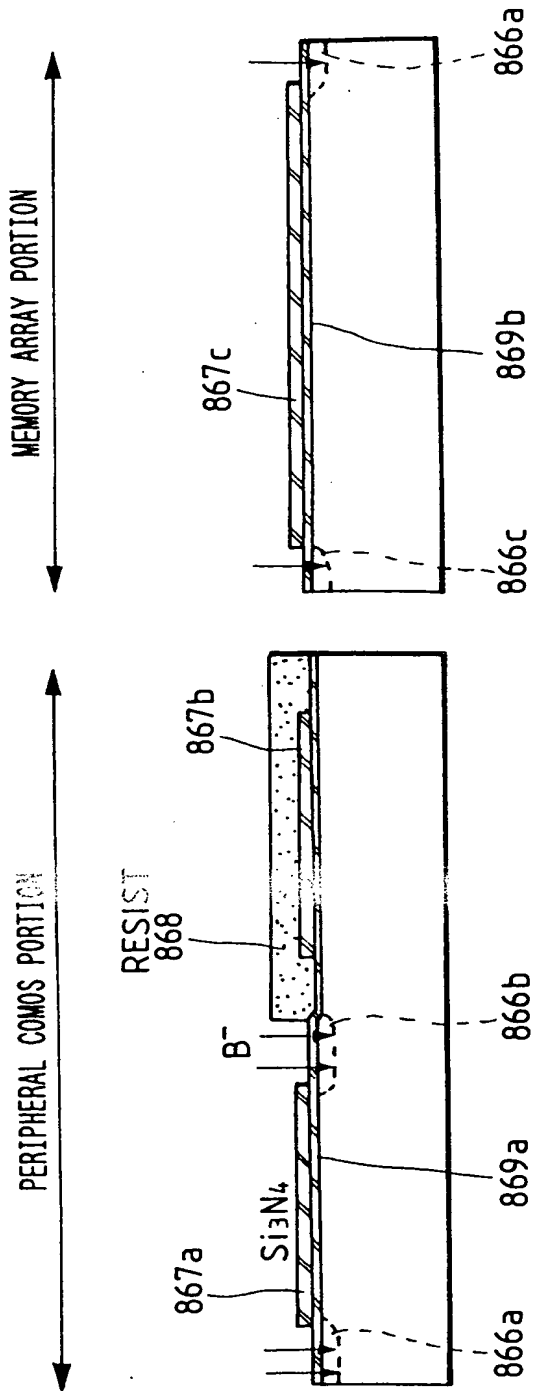


FIG. 8D

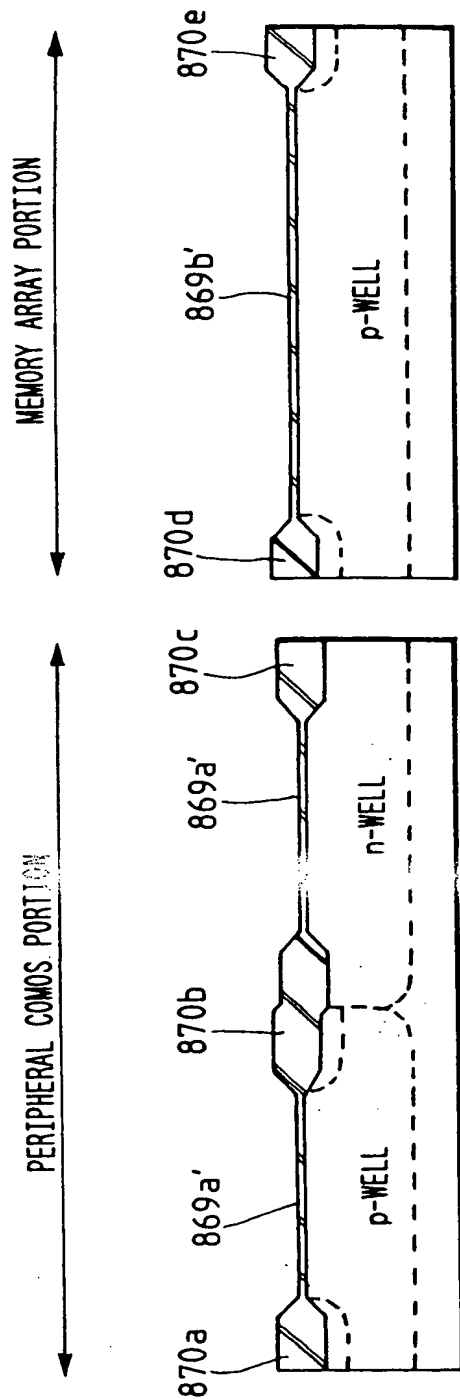


FIG. 8E

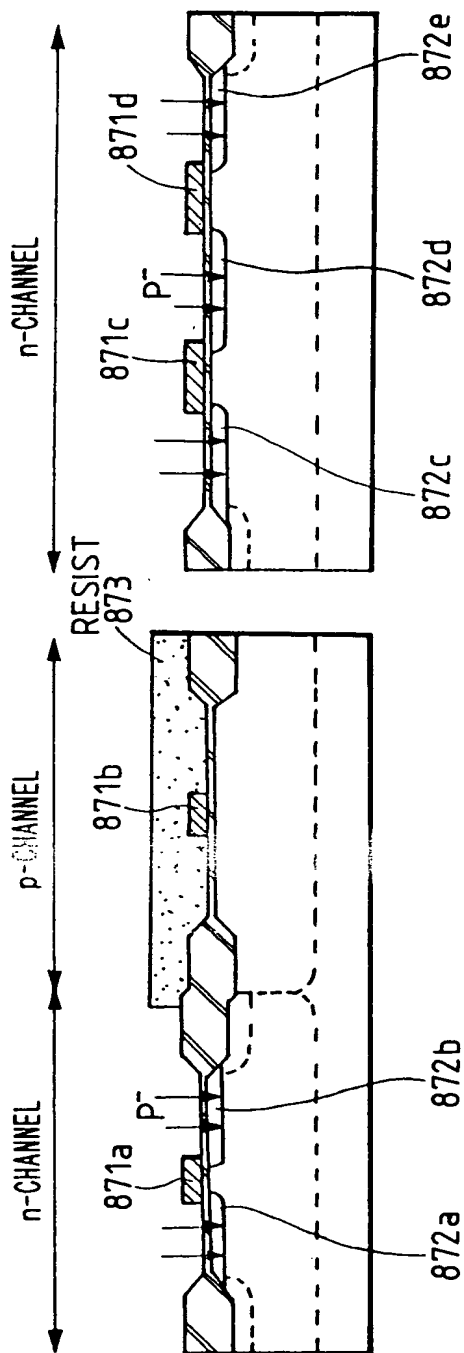


FIG. 8F

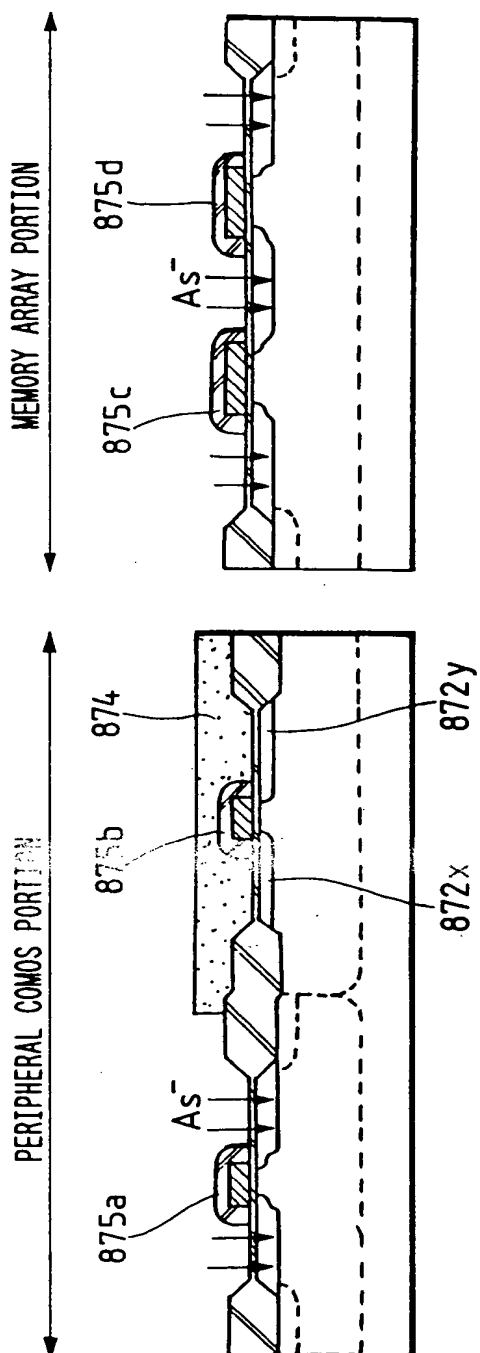


FIG. 8G

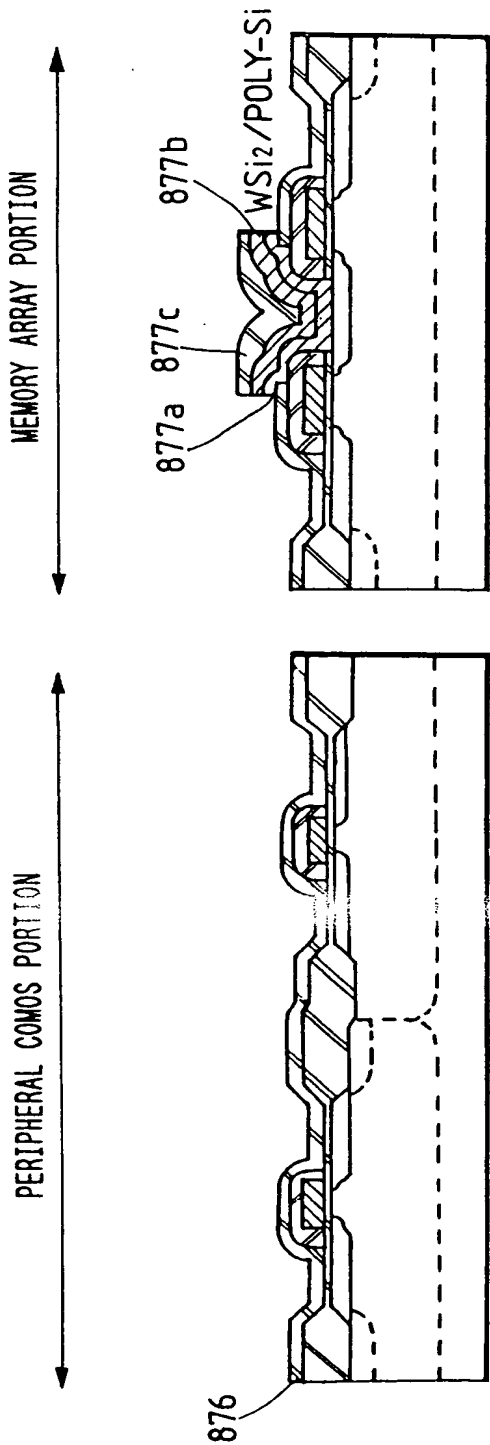


FIG. 8H

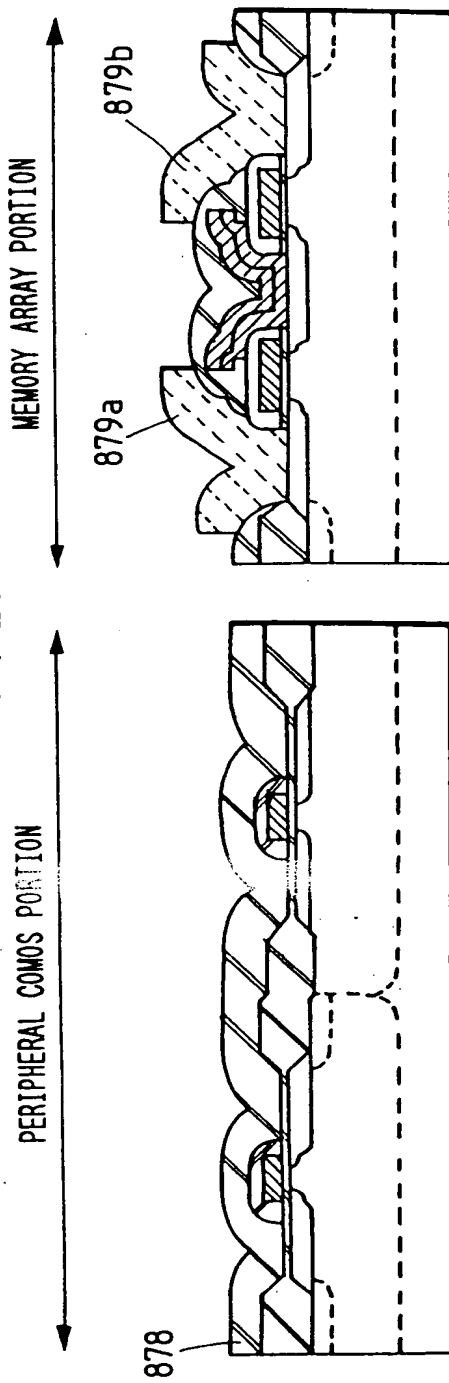


FIG. 8I

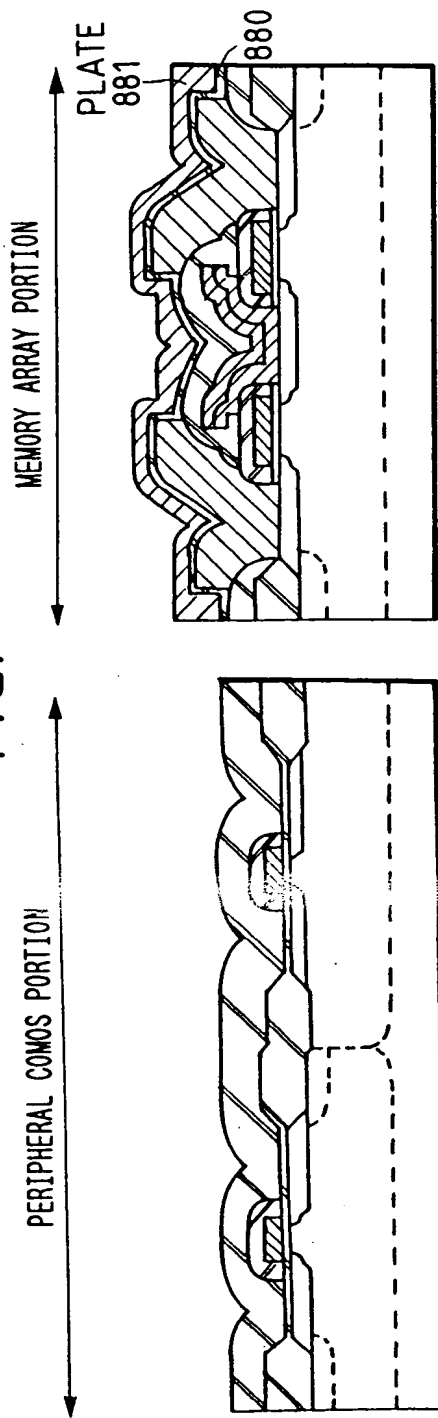


FIG. 8J

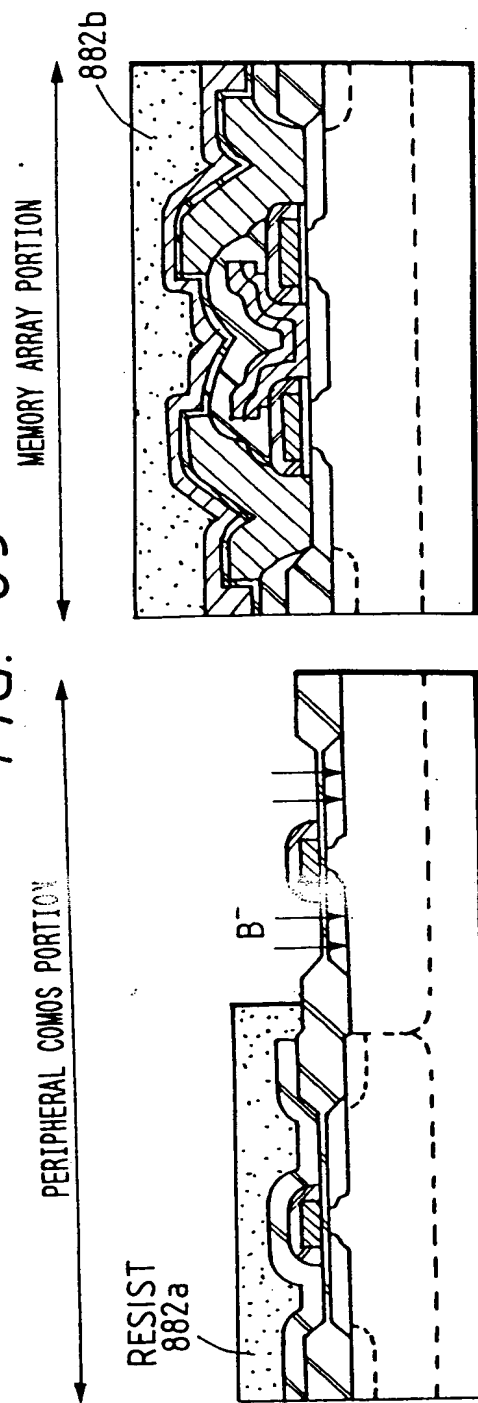


FIG. 8K

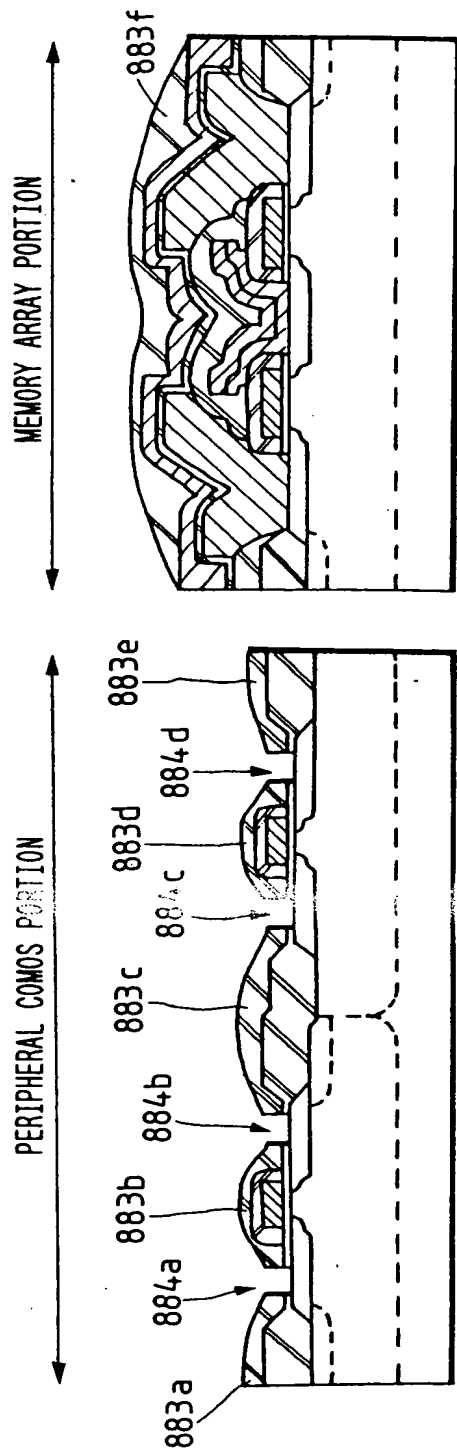


FIG. 8L

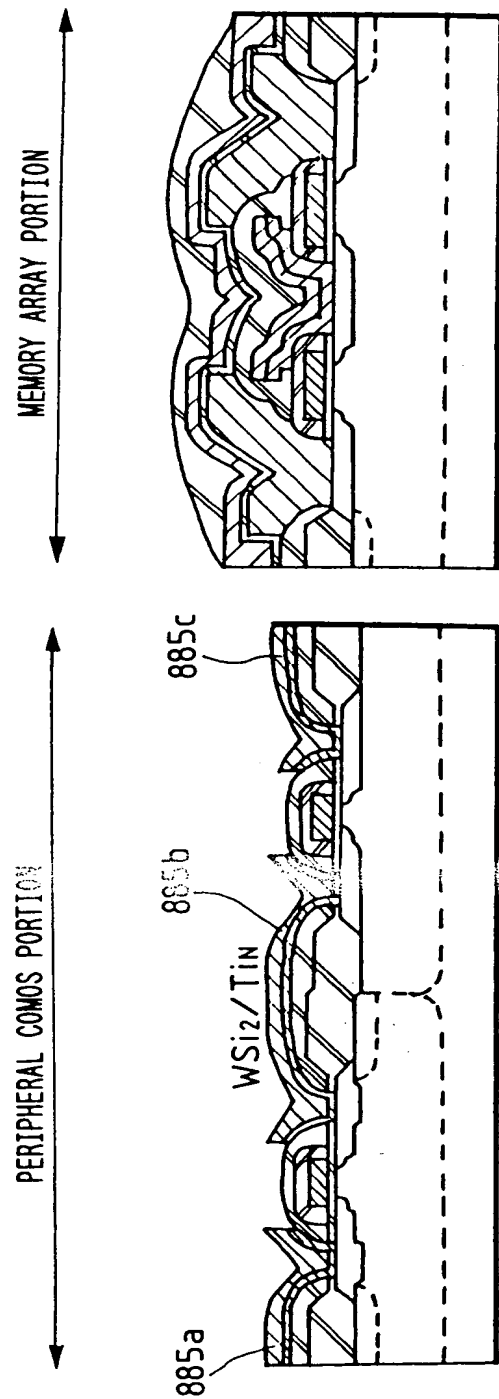


FIG. 8M

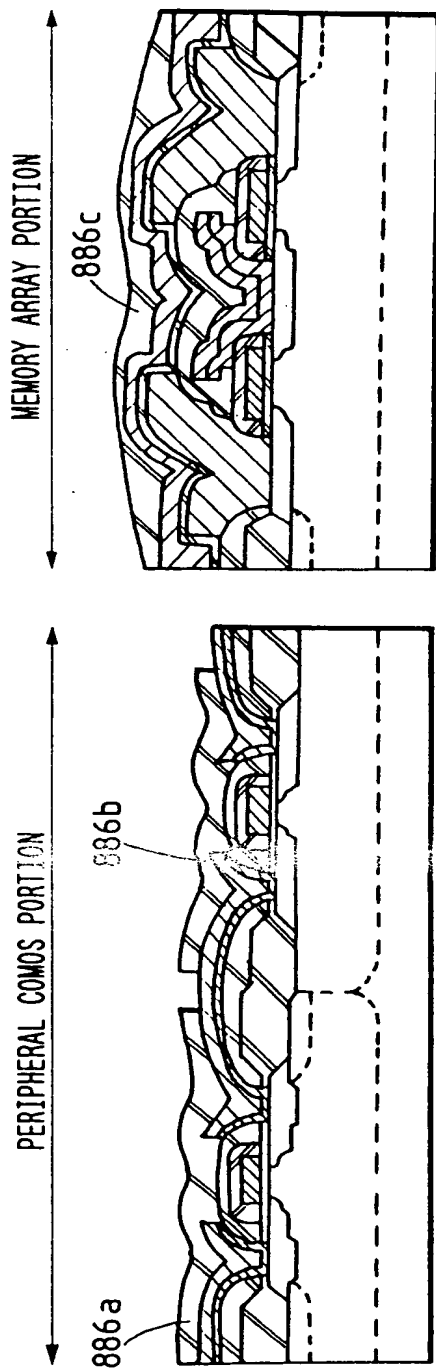
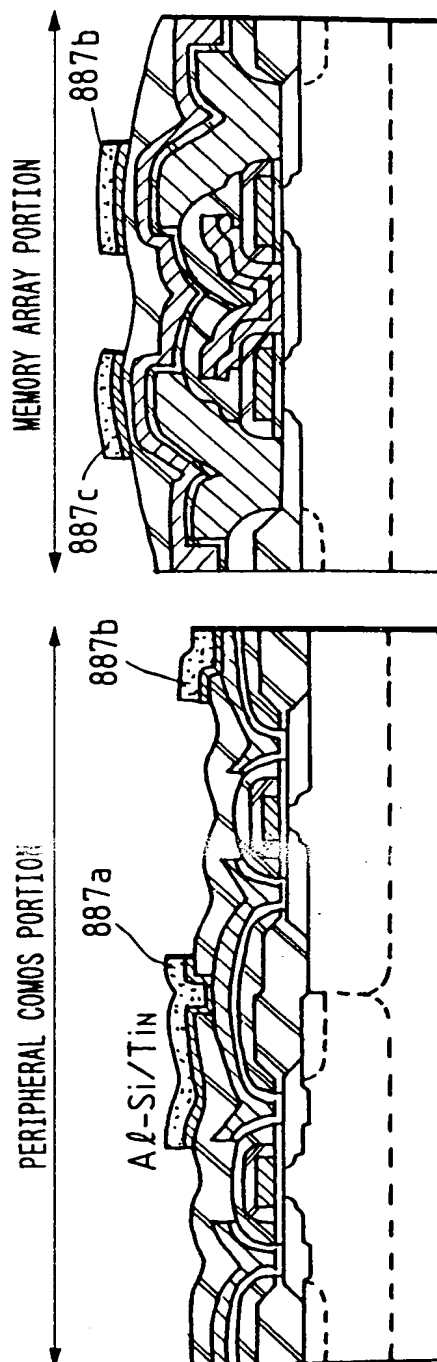


FIG. 8N



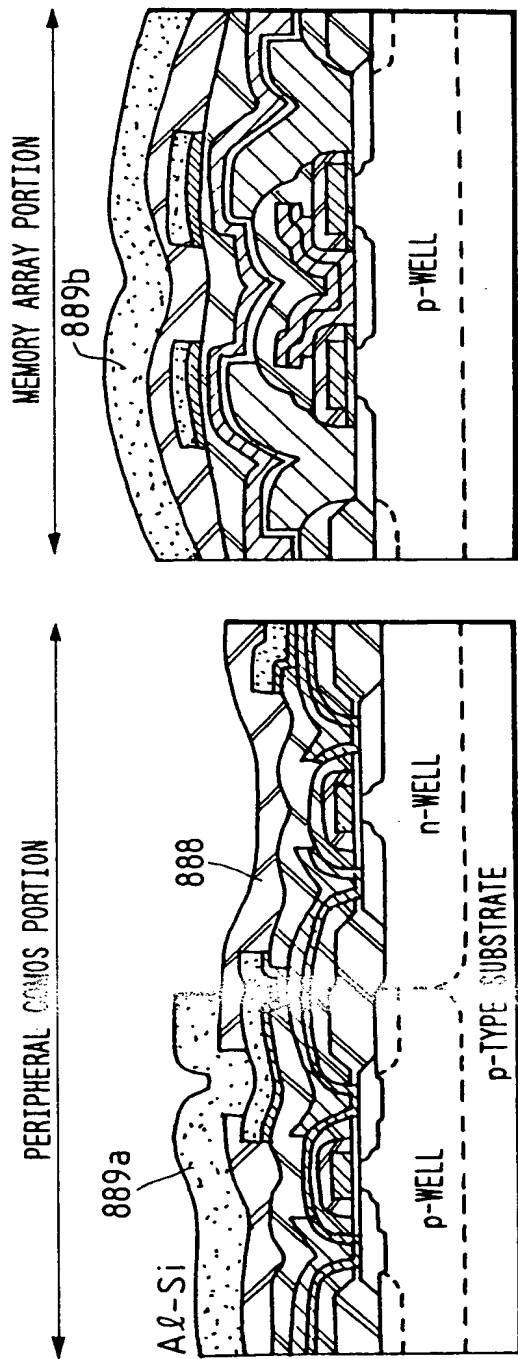


FIG. 80

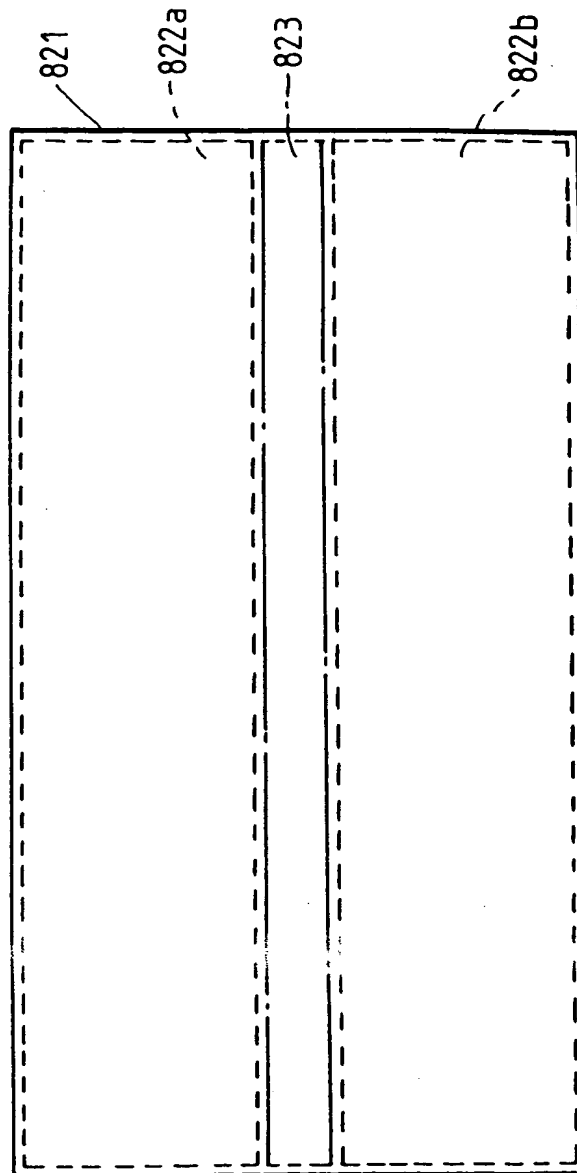


FIG. 8P

FIG. 8Q

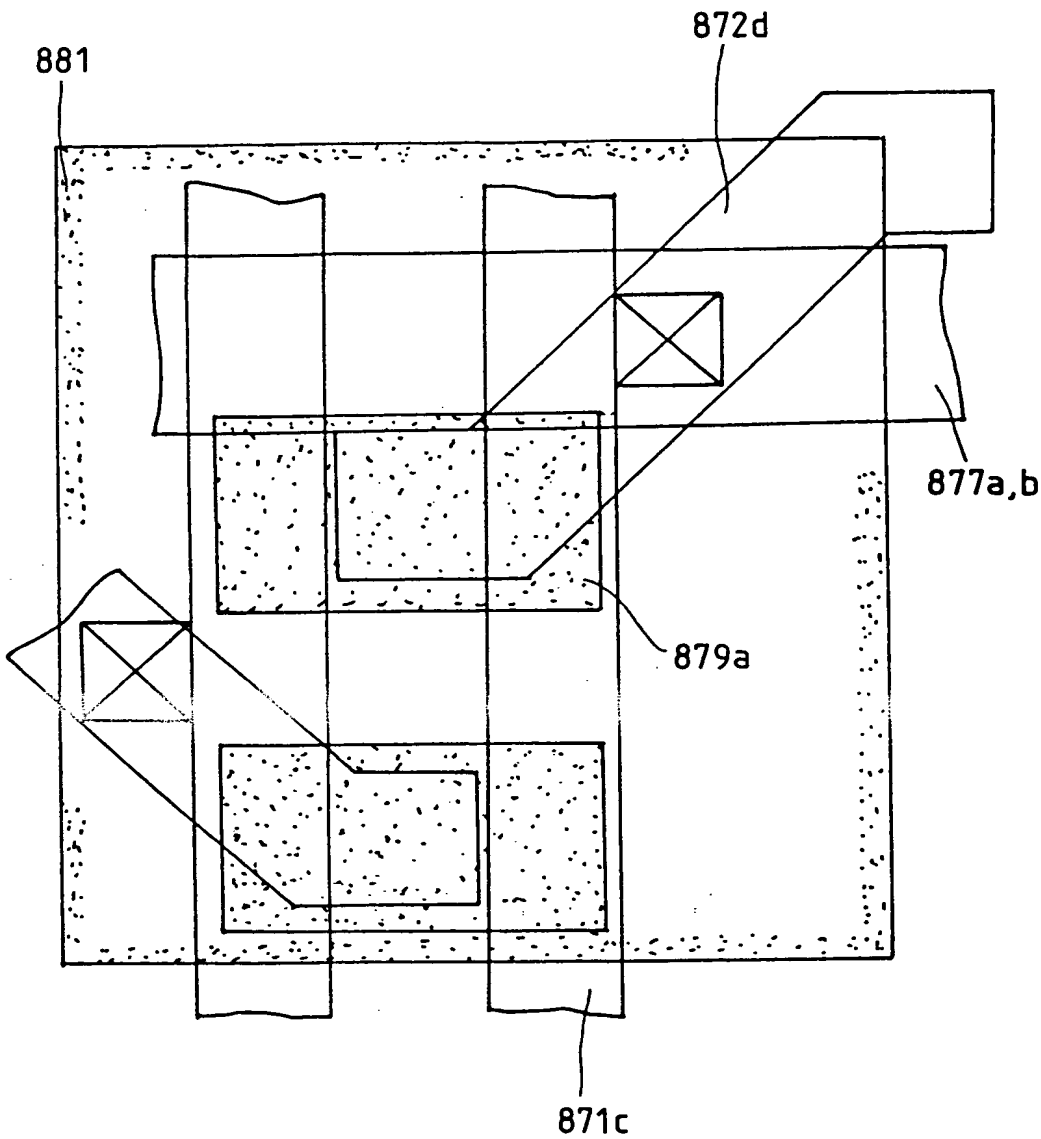


FIG. 9A

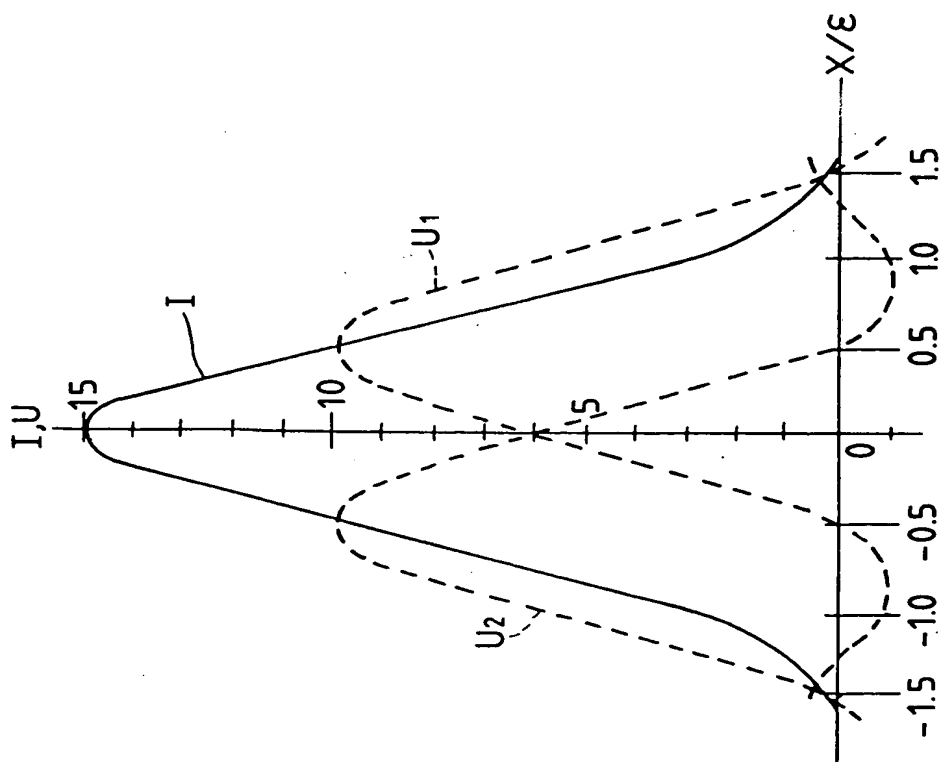


FIG. 9B

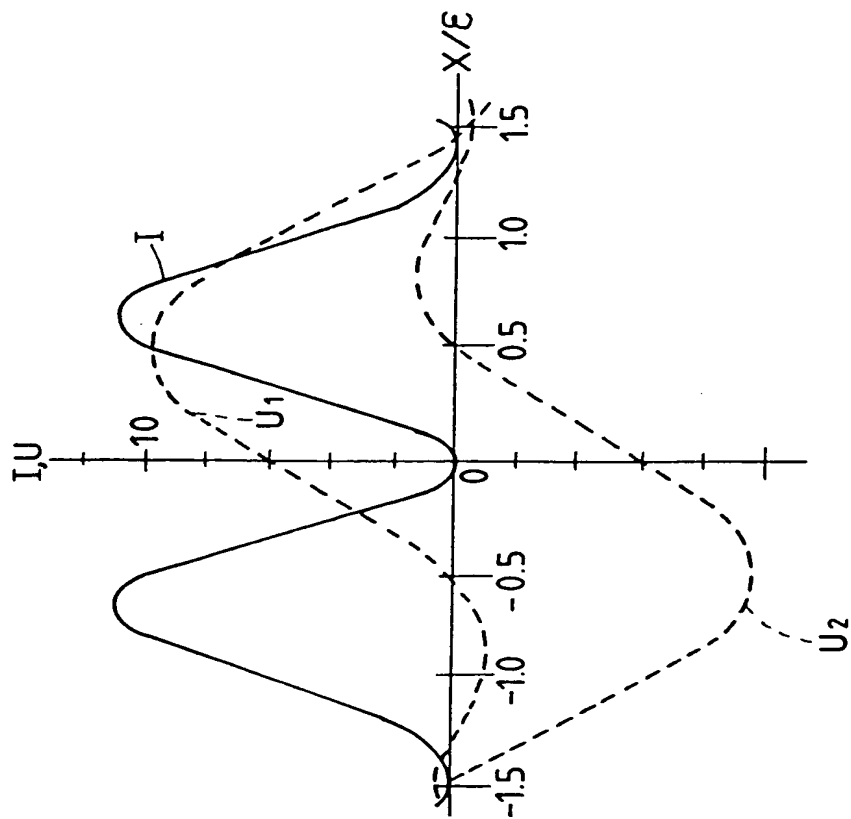


FIG. 9C

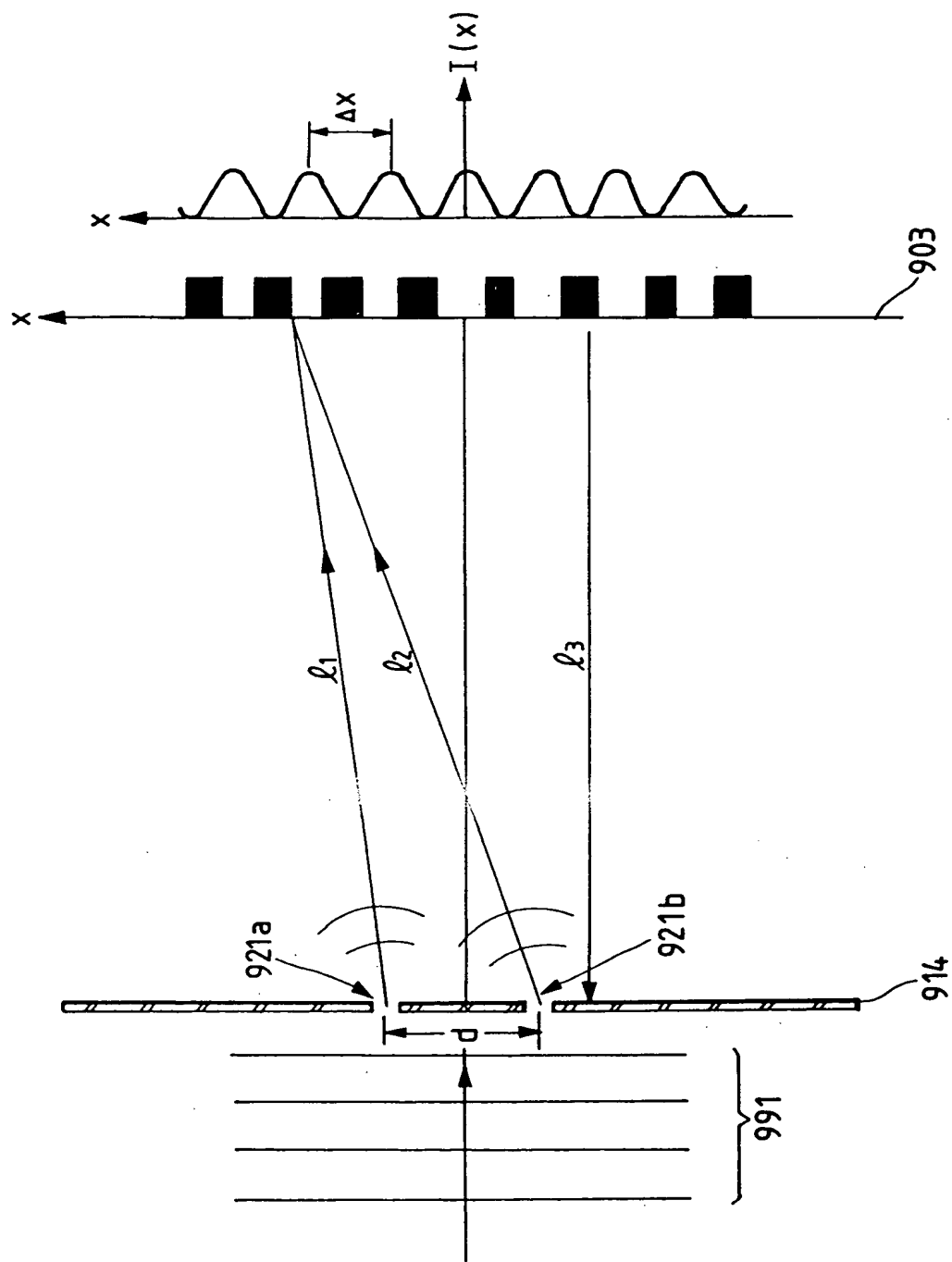


FIG. 10A

CONDITIONS LINE SOURCE	CENTER WAVELENGTH	BAND WIDTH	PARTIAL COHERENCE	REMARKS
I-LINE OF HIGH- PRESSURE Hg LAMP	365 nm	7~10 nm	0.2~1.1	
KrF EXCIMER LASER	248 nm	ABOUT 0.001 nm	0.2~1.1	DEEP UV REGION
ArF EXCIMER LASER	193 nm	DITTO	0.2~1.1	DITTO

FIG. 11A

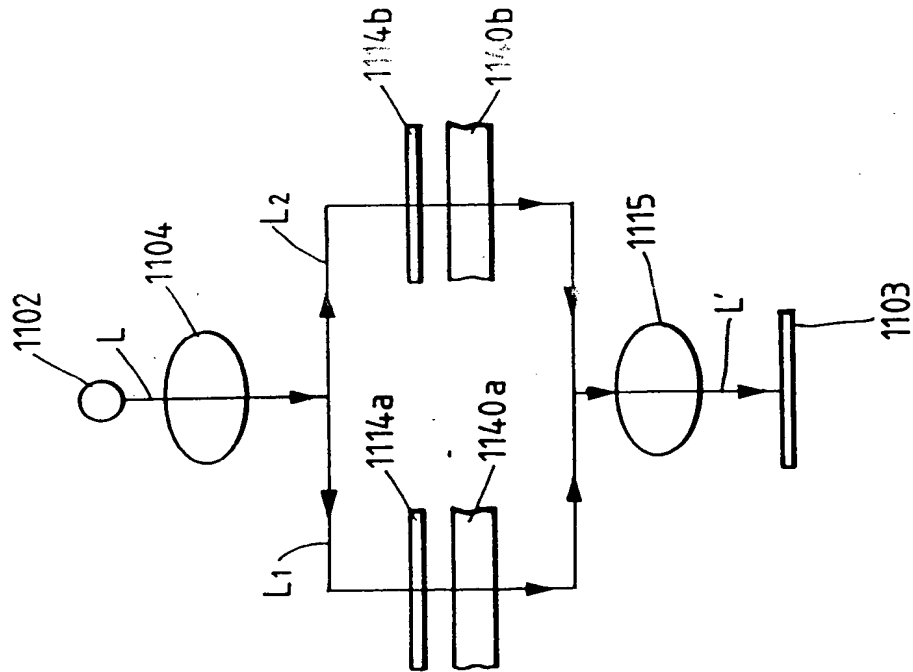


FIG. 12A

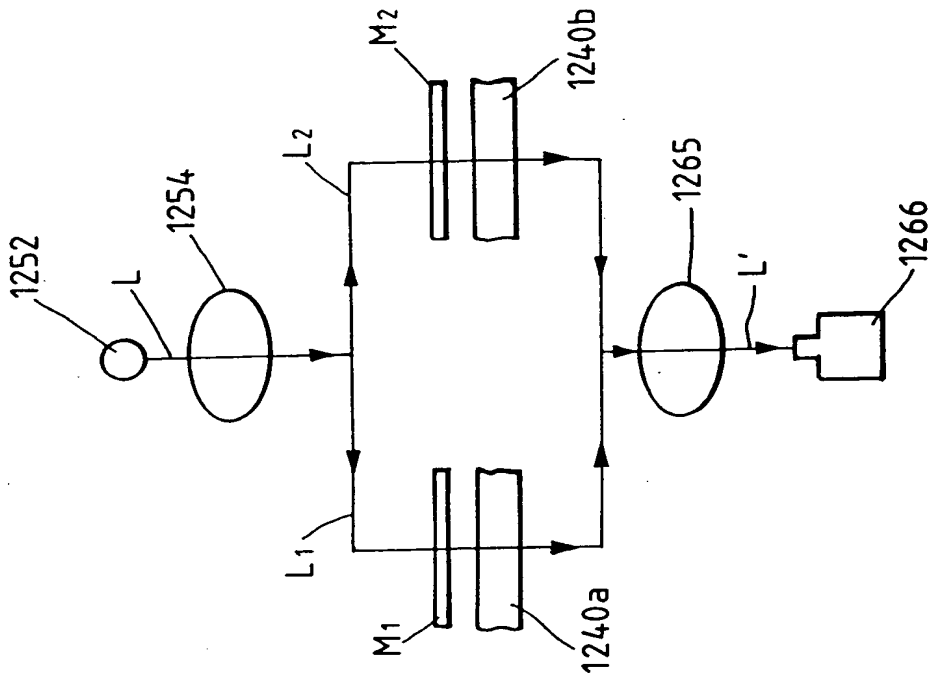


FIG. 13A

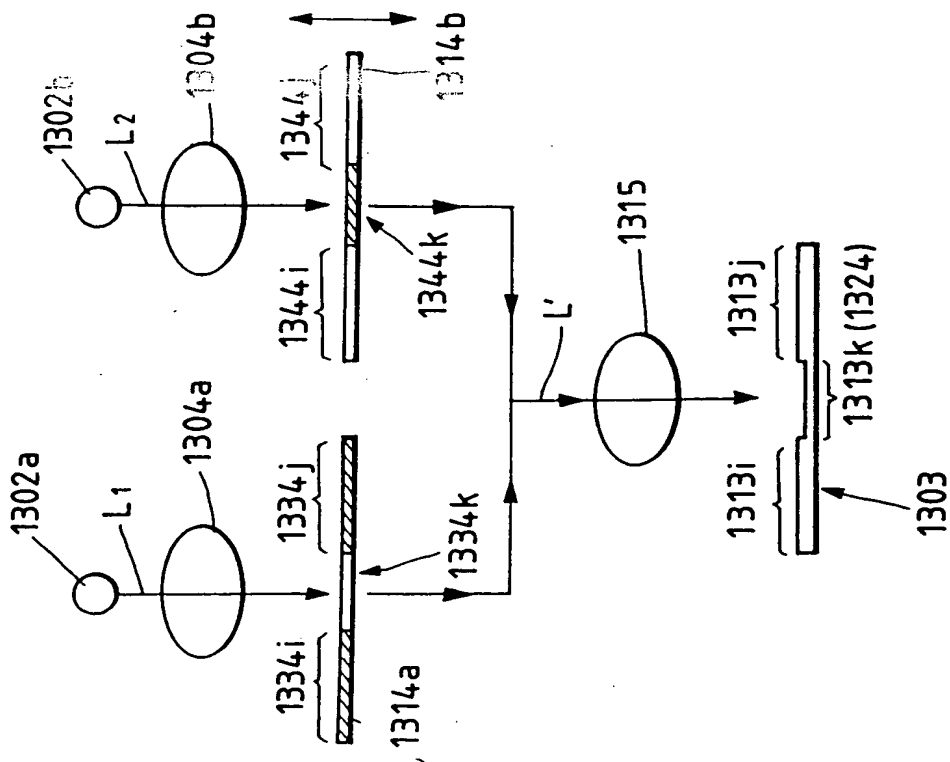


FIG. 13B

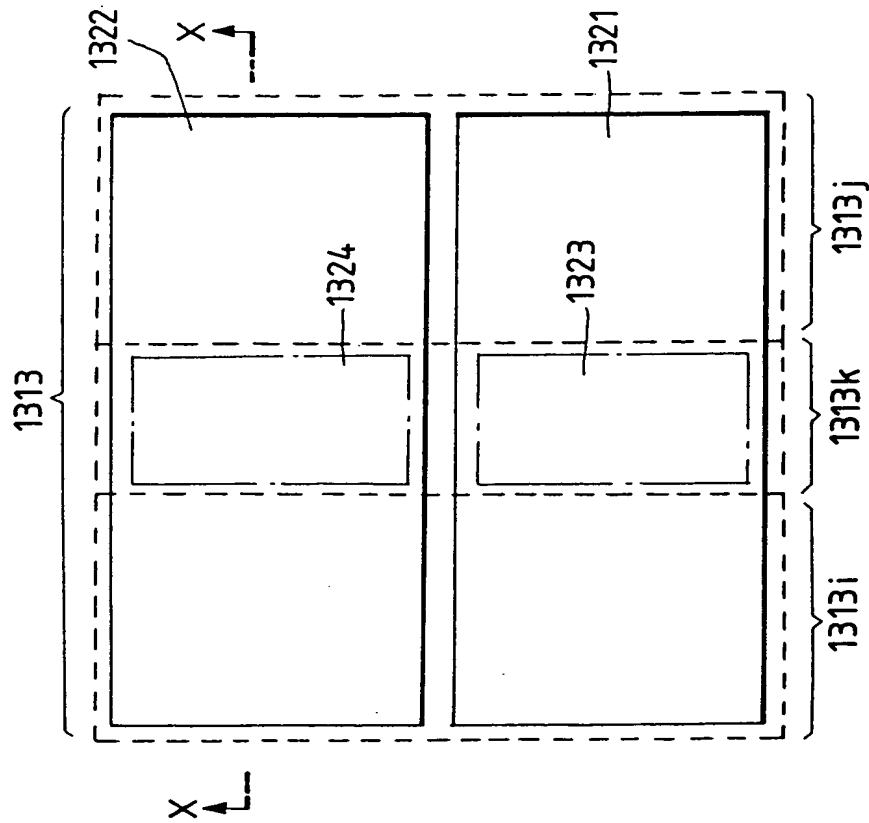


FIG. 14A

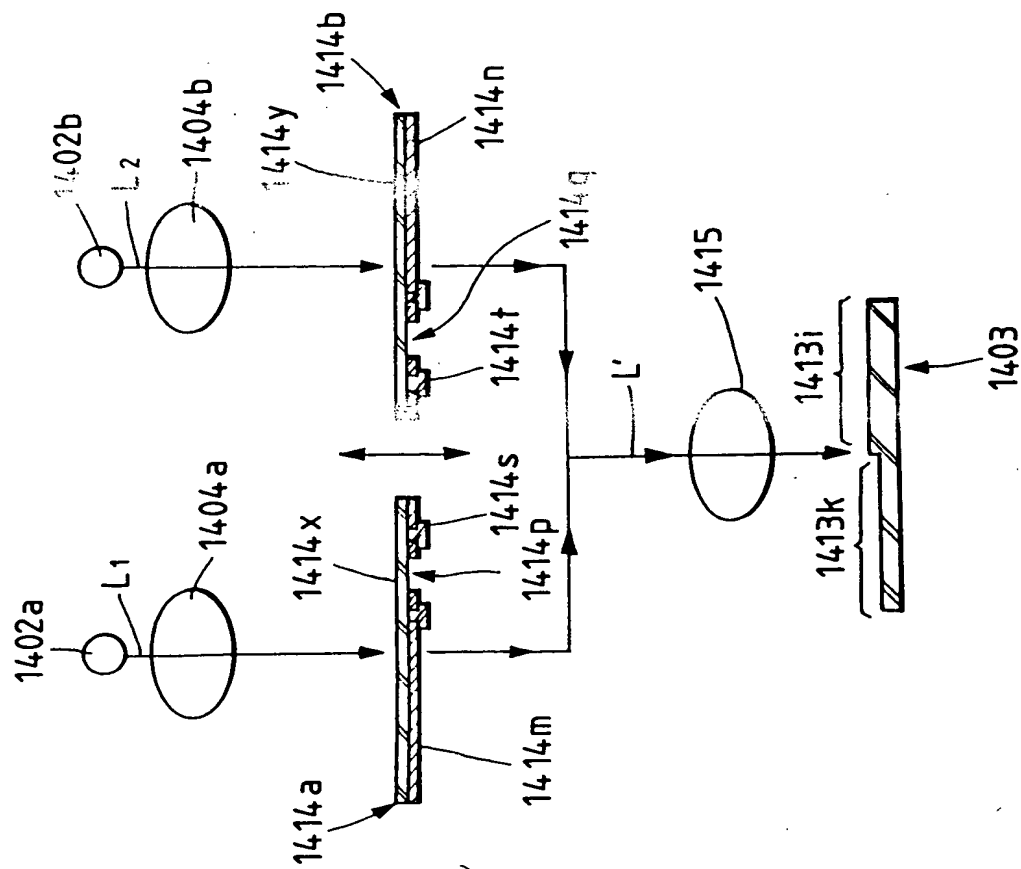


FIG. 14B

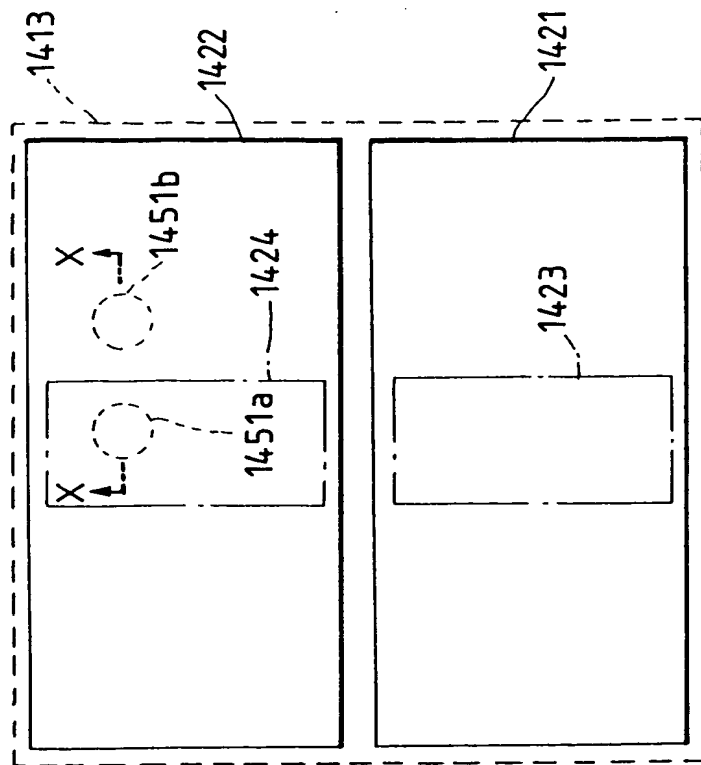


FIG. 14C

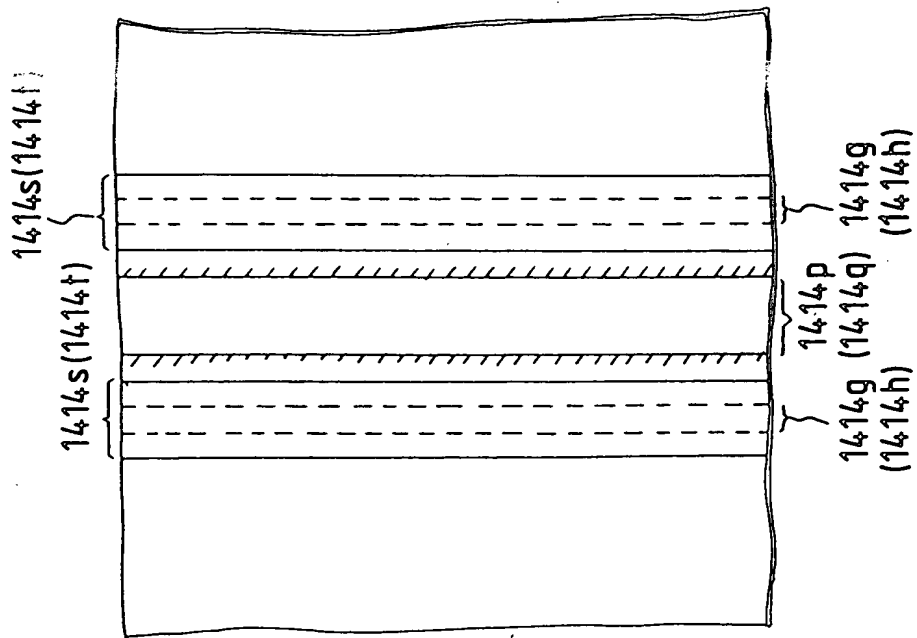


FIG. 15A

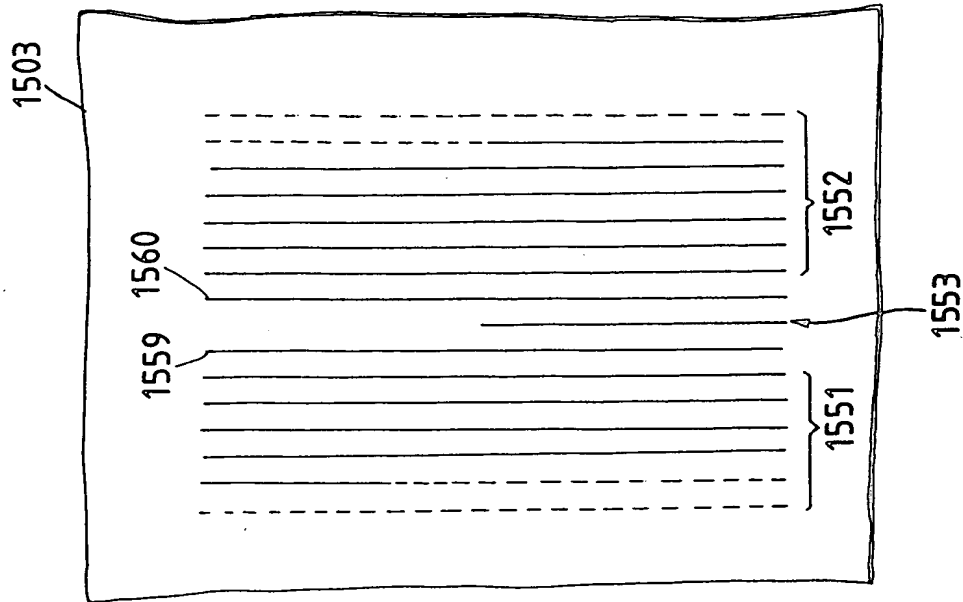


FIG. 15B

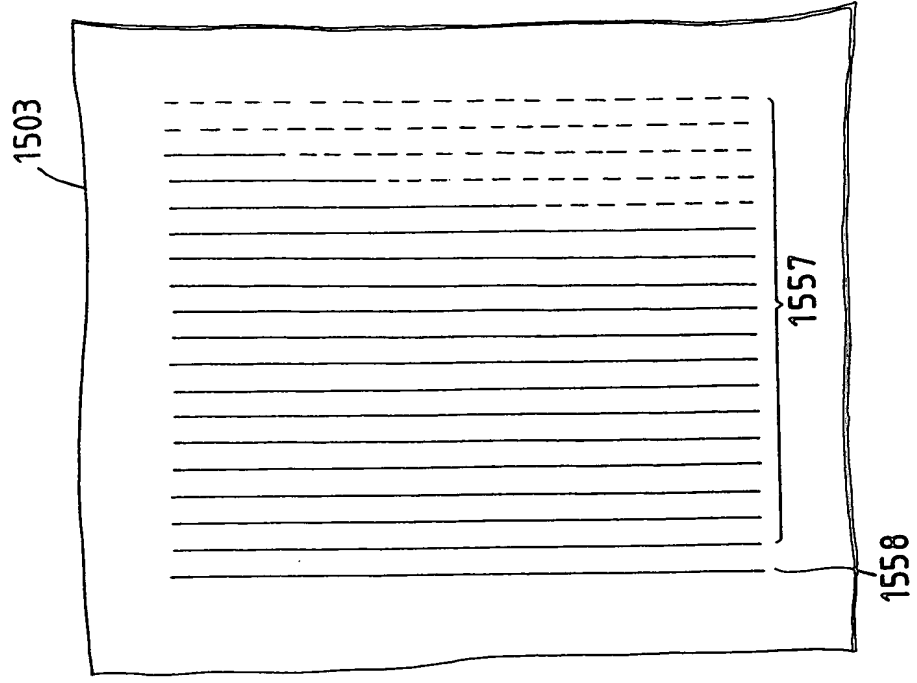
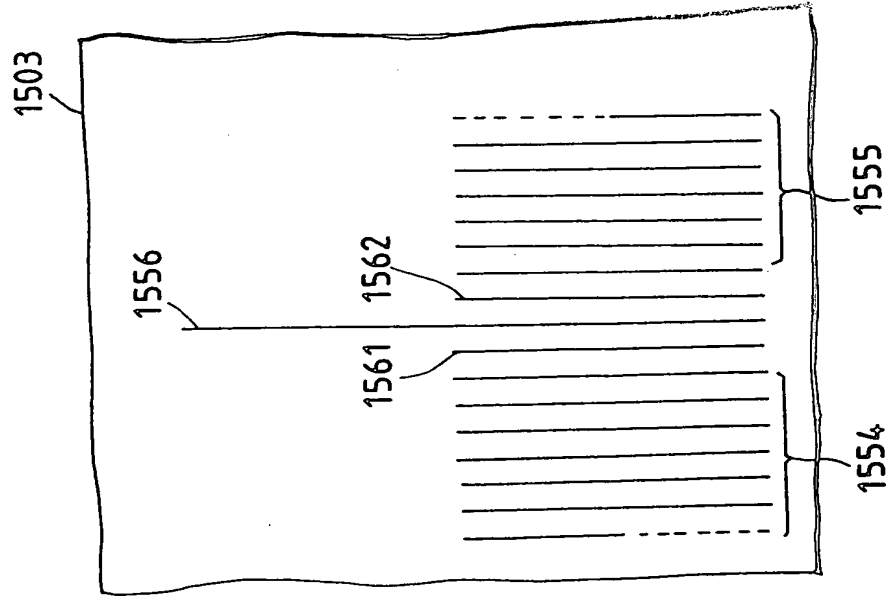


FIG. 15D

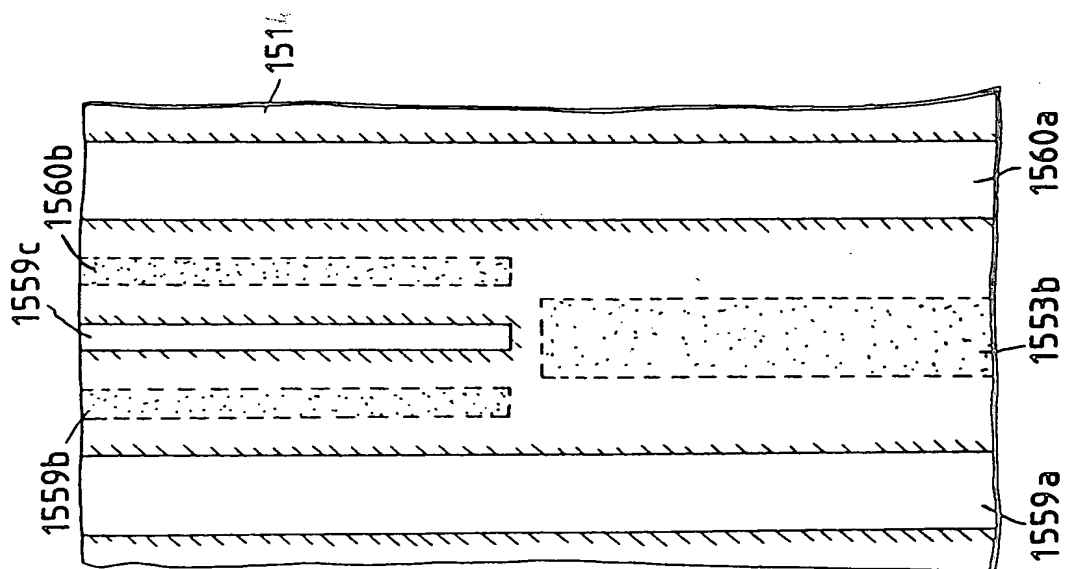
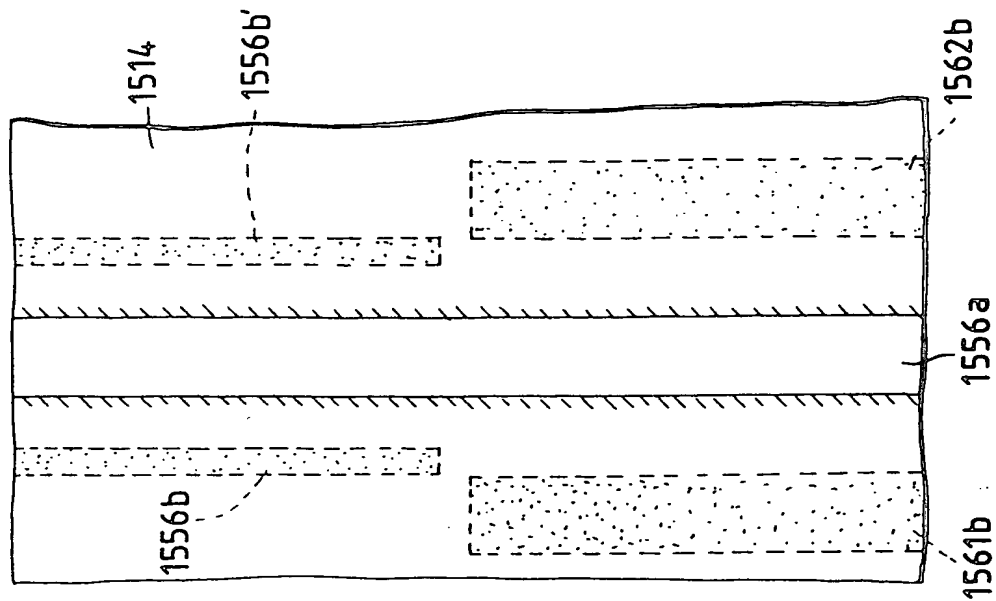


FIG. 15E



MM	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
MM	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100

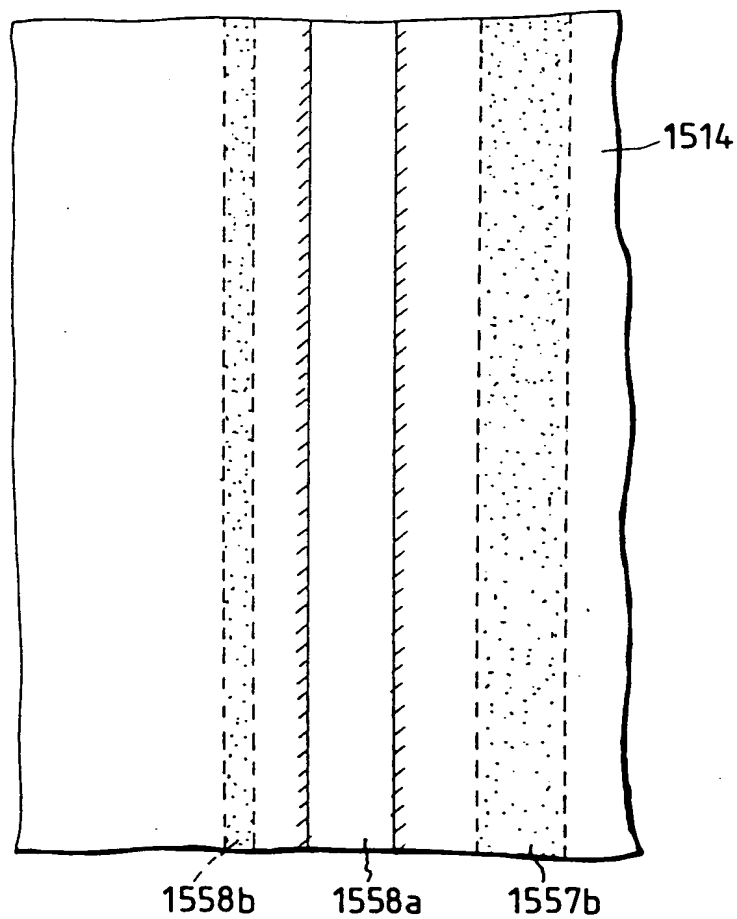


FIG. 16A

EXPOSURE BEAM \ RESIST NAME	POSITIVE RESIST	NEGATIVE RESIST
I-LINE (365nm)	① HITACHI KASEI 「RAY CAST RI-7000P」 ② SHIPLEY COMPANY INC. 「TITAN LINE SERIES」	① HITACHI KASEI 「RU1100N」 ② TOKYO OHKA KOGYO 「ONNR20 SERIES」
KrF EXCIMER LASER (248nm)	① POLYMETHYL METHACRYLATE (ABBREV. PMMA) ② SHIPLEY COMPANY INC. (MICROPOSIT)	① HITACHI KASEI 「RD2000N」 ② FUJI YAKUHIIN KOGYO 「LMR」

FIG. 17A

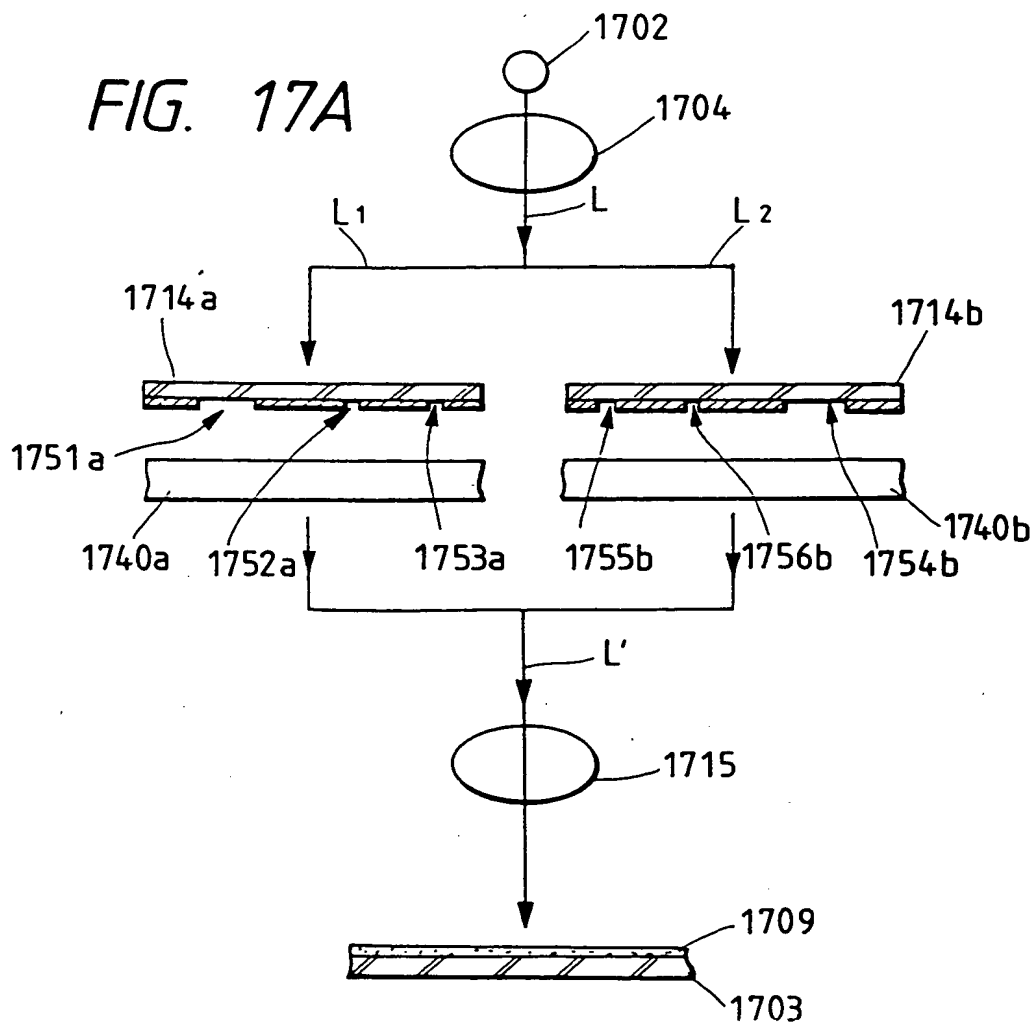


FIG. 17B

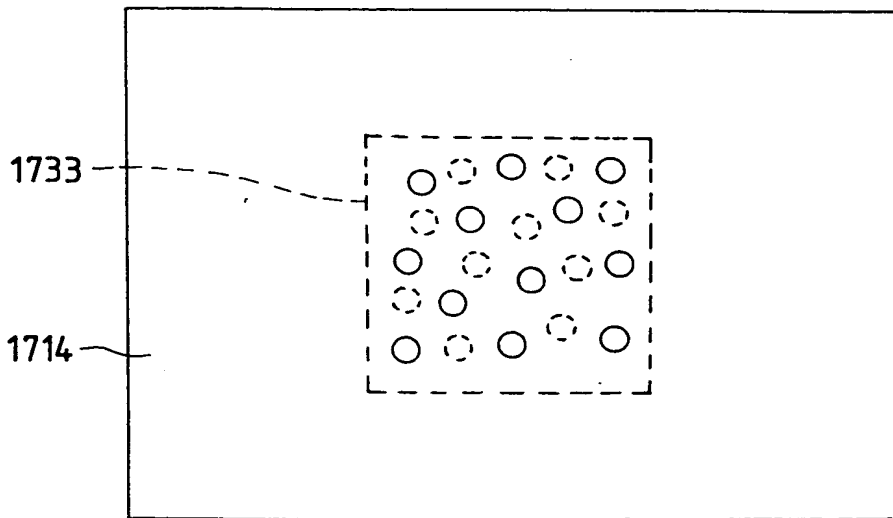


FIG. 18A

FIG. 18A

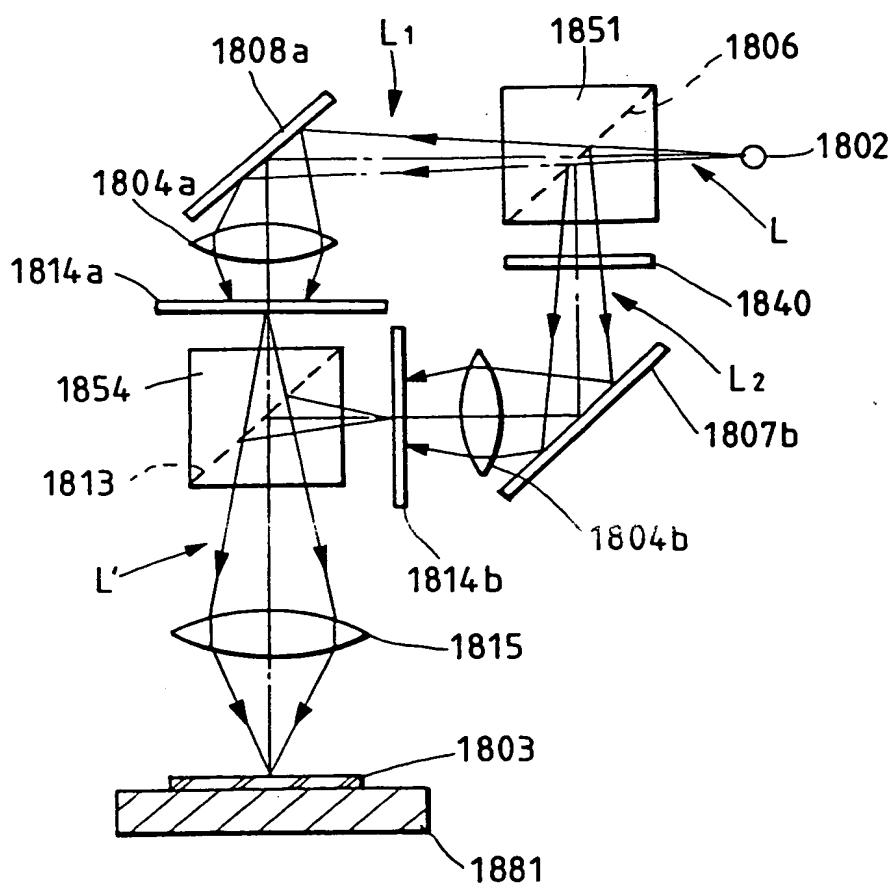


FIG. 19A

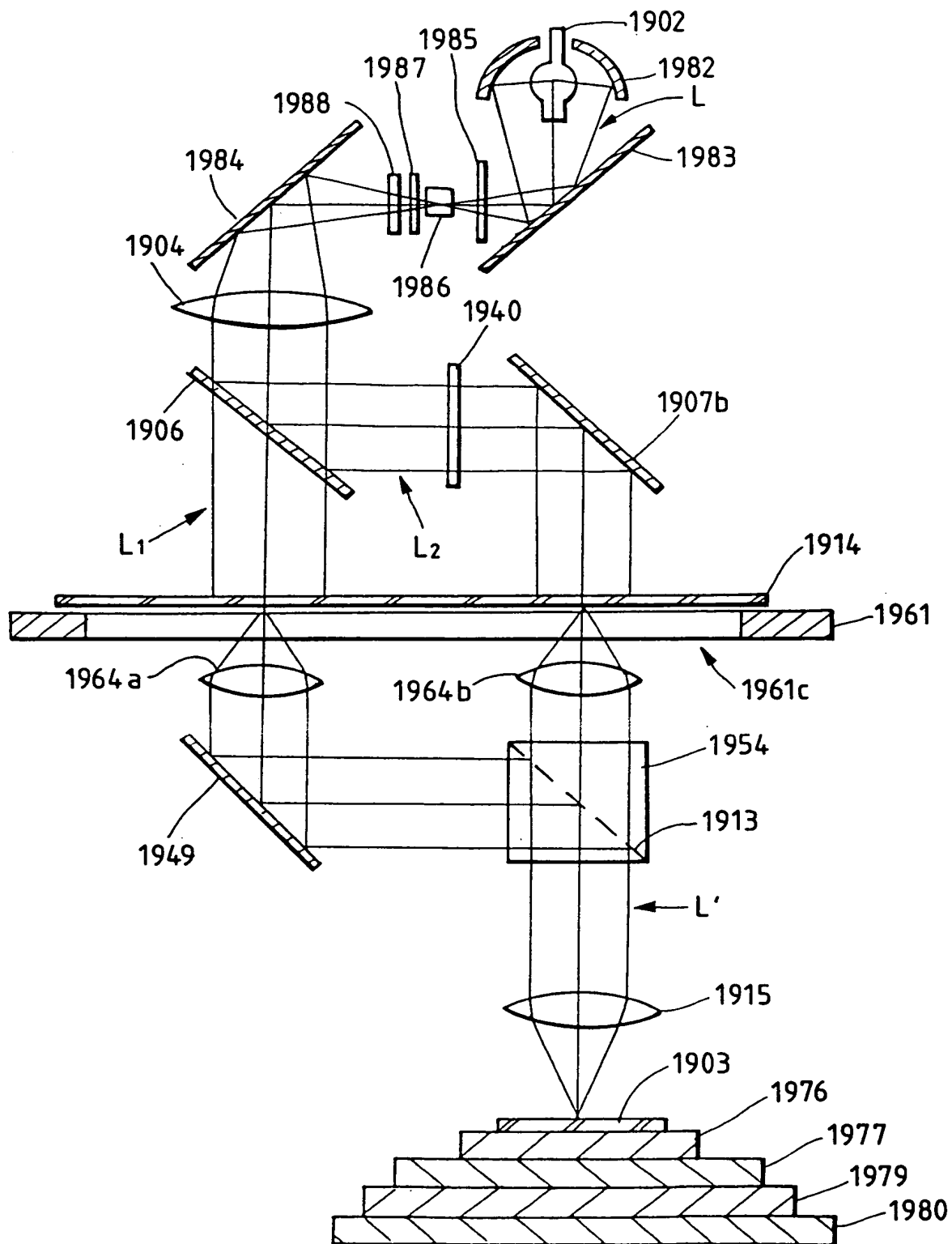


FIG. 20A

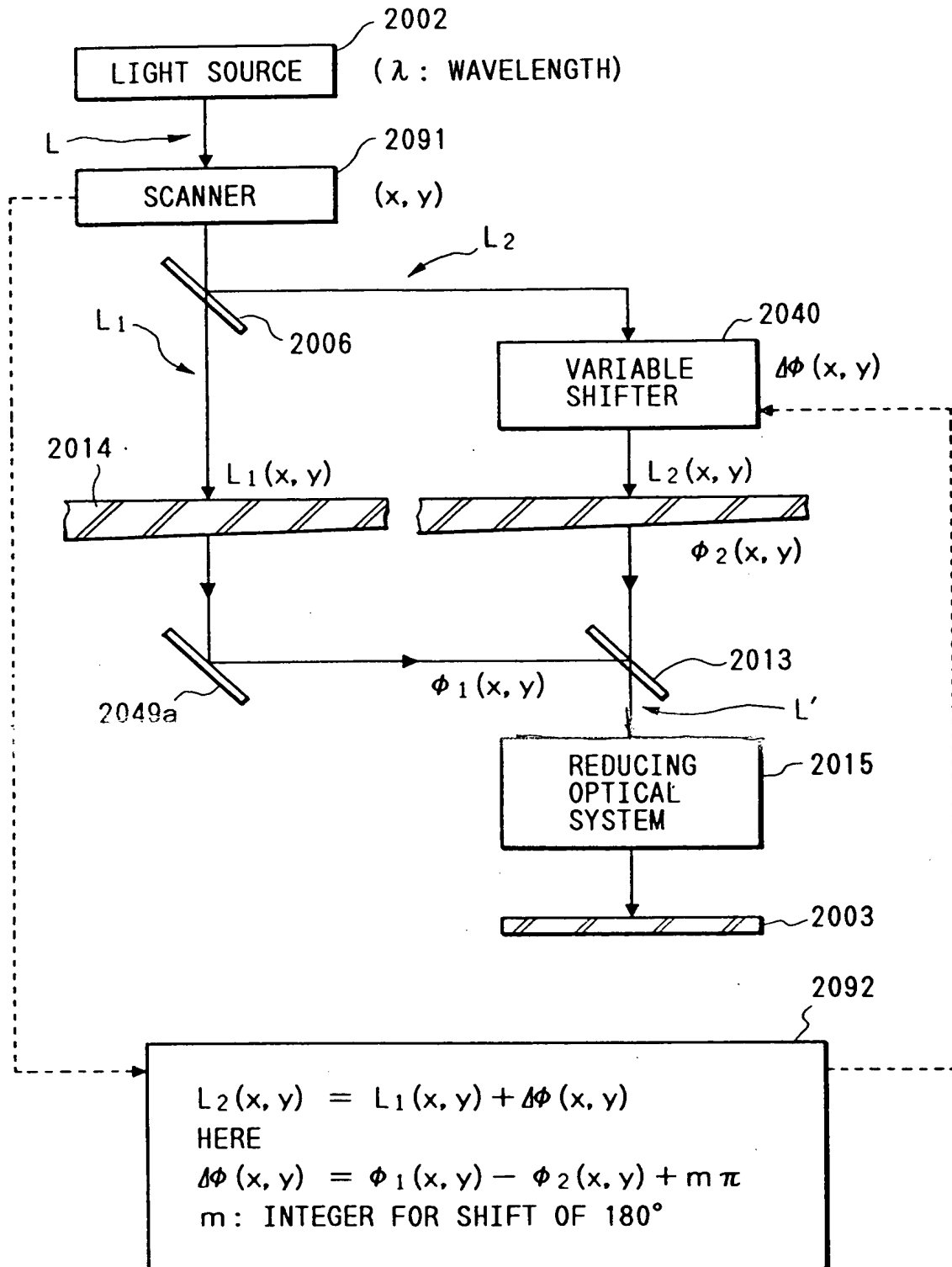


FIG. 20B

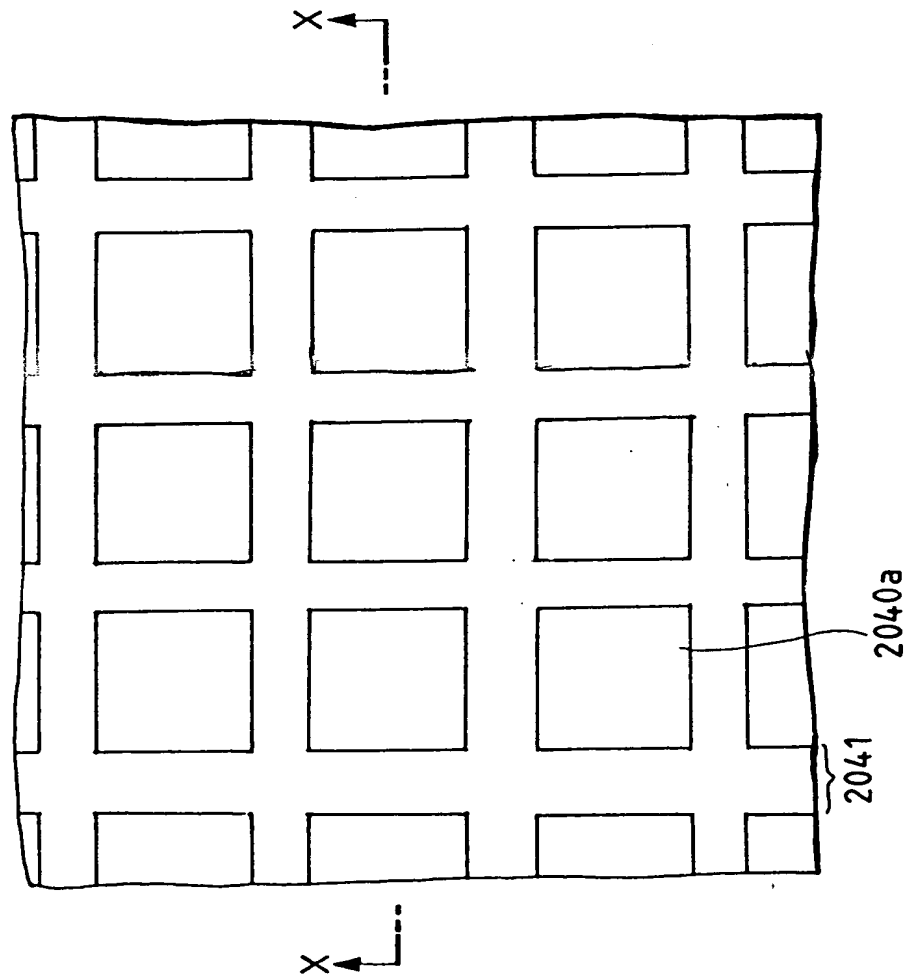


FIG. 20C

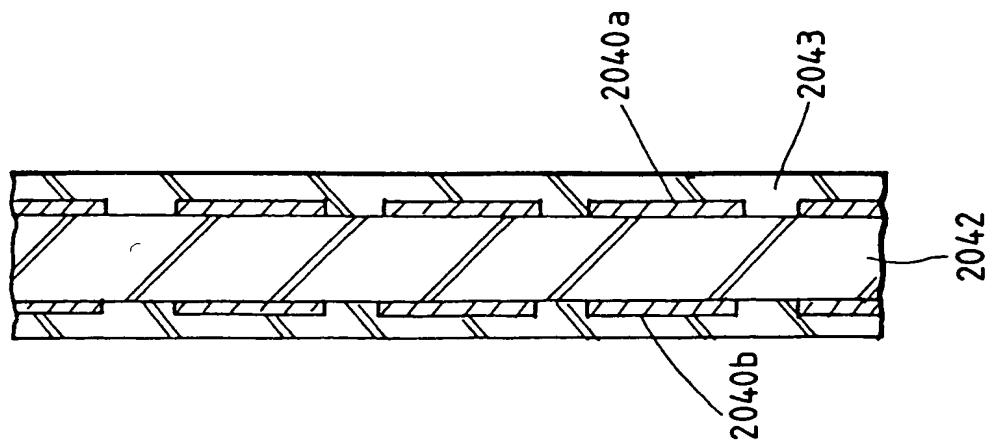


FIG. 20D

ABBREV.	CHEMICAL FORMULA	POINT GROUP	TRANSMISSIVE RANGE (μ m)
KDP	KH_2PO_4	42 m	0.27 ~ 1.7
DKDP	KD_2PO_4	42 m	0.2 ~ 1.6
ADP	$\text{NH}_4\text{H}_2\text{PO}_4$	42 m	0.13 ~ 1.7